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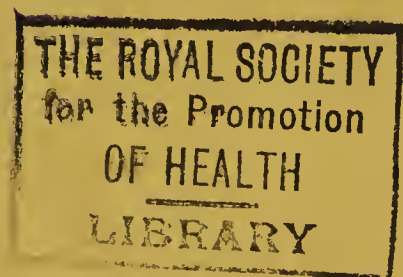


HEALTH DEPARTMENT

ANNUAL REPORT

FOR

1955



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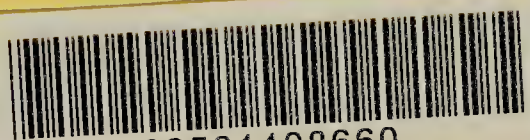
B. V. SUNDARABABU, M.B., B.S., D. P. H. (CAL.)

HEALTH OFFICER

CORPORATION OF MADRAS

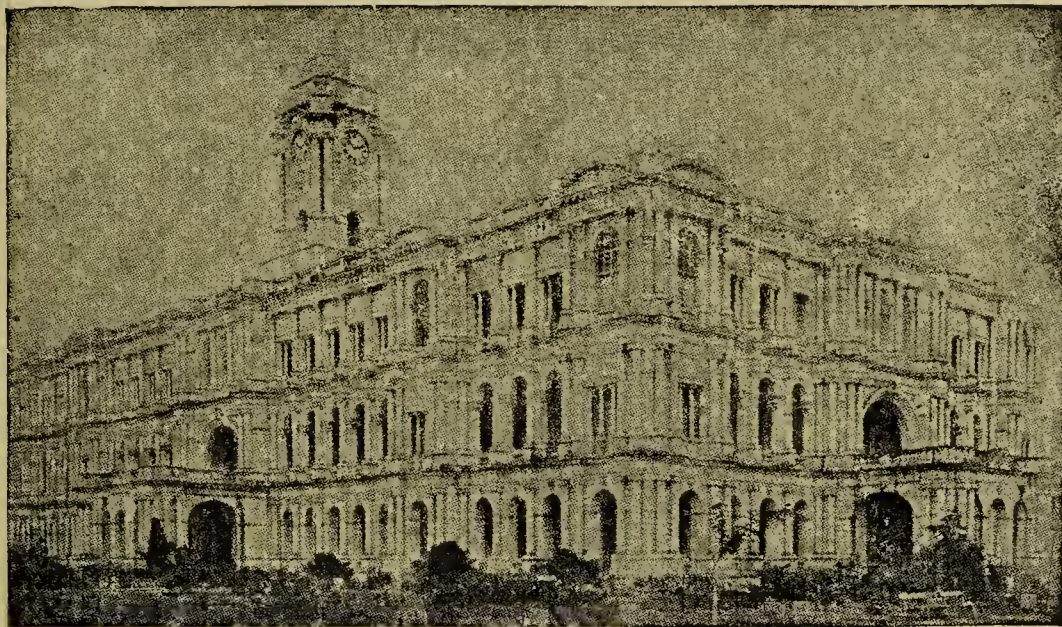
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CORPORATION OF MADRAS

HEALTH DEPARTMENT

ANNUAL REPORT FOR 1955

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INTRODUCTION

I have much pleasure in presenting the report on the health of the City of Madras during the year 1955. In doing so let me, without deviating from the path tread by my predecessors in office, venture to make a few observations by way of resume and comment.

During the year under report, Dr. S. E. D. Masilamani, M.B.B.S., B.S.Sc., D.P.H. (London) was the Health Officer till 14-2-1955 and he was succeeded by Dr. A. Ranganathan, L. M. & S., B.S.Sc., who was till then the senior most Assistant Health Officer. Having succeeded a hierarchy of able Health Officers, Dr. A. Ranganathan strove to maintain the high traditions set up by his predecessors in office. He retired on 6-8-1956 and as his successor in office, the presentation of this report has fallen to my lot. I therefore consider it my bounden duty to take this opportunity to point out that the bright features discernable in the report for the year under review are attributable to his health administration of the city.

The vital statistical figures for the year represent a progressive trend in the health situation of the city. 66,449 births with a birth rate of 40.26 per mille showed an upward trend. 34,264 deaths yielded a death rate of 20.76 per mille which is the lowest to be recorded so far. There was an excess of 32,185 births over deaths—a feature that is being recorded continuously from the year 1946 onward. The infantile mortality rate which is considered to be a true index of social improvement was 143.22 per 1000 live births, the rate for the previous 5 years being 166.88. The maternal mortality rate was 2.34 per 1000 live and still births against 2.47 for the previous year.

The city had no case of cholera and was practically free from small pox. 167 sporadic cases of small pox were recorded. The mortality therefrom was 28 with a rate of 0.02. The prevalence of enteric fever accounted for 1,490 cases with 155 deaths. Its effective control needs close co-operation of the public and of the private medical practitioners.

A new feature of the report on vital statistics of the city is the inclusion of rates of births, deaths, and other causes on the basis of the number of excess births over deaths. This has been done in pursuance of the observations of the Government in their review of the Annual Health Report for the year 1954. Vital statistical rates on the basis of the estimated midyear population are also given so as to be of use for the purpose of comparative study in relation to the health reports of other leading cities.

Prior to the issue of International Certificates of inoculation and vaccination without charge, the Corporation was deriving an income of about Rs. 25,000 annually. Only a nominal fee was levied to cover the expenses incurred for inoculating and vaccinating, the maintenance of registers and attendance to correspondence involved. In view of the nature of the authentication done requiring special care and the deprivation of an income the Corporation was previously getting, I would suggest the State Government taking up the matter with the Central Government for revising their orders in this behalf.

The facilities available to the public, particularly the lower middle class and poorer sections, for free medical relief were extended by the opening of two general dispensaries, removing a long felt need in the 11th and the 40th divisions. The opening of 8 more dispensaries was under active consideration. This is apart from the progress made in respect of maternal and child welfare to which reference is made later.

Medical care of school children was continued without any increase in the personnel engaged in the work. While the number of Corpo-

ration elementary schools and the strength of the children attending them have been steadily growing year after year, there has been no corresponding increase in the Medical Inspection staff. The proposal for the appointment of personnel on honorary basis was still under consideration.

Applications for offensive trades in residential areas declared as such in pursuance of the provisions of the Madras Public Health Act continued to be received necessitating the refusal of licences for such trades and resulting in appeals to the Standing Committees and references to the Council and the Government. In view of the representations received and the developments that had taken place by the time the draft proposals for residential reservations were finally approved by the competent authorities, the need for reclassifying some of the areas zoned as residential was felt and a proposal for such reclassification was taken on hand in consultation with the Town Planning Section of the Corporation.

The opening of the Care Camp and the Care Home at Melpakkam as a work house and as a special home respectively under the provisions of the Madras City Police Act by the Government enabled the Corporation to effect the closure of the Corporation Work House in Royapuram and to convert it into an institution for taking care of and give training to under-privileged children. The inmates of the Work House were transferred to the Government Care Camp and the premises was suitably altered and a Children's Home was opened by the Hon'ble Sri C. Subramaniam, Finance Minister, Government of Madras, on 26-12-1955. On the same day an association under the registered name of the Madras City Council for Child Welfare was inaugurated there by Srimathi Durgabhai Deshmukh. A proposal to hand over the management of the Children's Home to the newly formed association was pending consideration by the Corporation Council.

The year formed an important epoch in the history of the zoo. It attained the 100th year of its existence and to mark the event the centenary of the zoo was celebrated in a befitting manner. The zoo was extended, rare and valuable animals were procured, a commemoration tower was erected, the entrance and the layout were remodelled and the antiquated cages were rebuilt in connection with the celebration.

The centenary celebration was inaugurated by the Governor of Madras and the commemoration address was delivered by Sri R. P. Sethu Pillai. A novel feature of the celebration was the 'Night Zoo' rendered possible by the illumination of the animal cages. Special shows for pets, dogs, horses, poultry and fish were arranged and prizes given to the best animals exhibited. An exhibition was also organized and conducted. Dance recitals and drama performances were arranged to popularise the celebration. Thanks are due to the Government, firms, institutions and the public for the support and patronage extended by them.

The year witnessed the inauguration of the National Malaria Control Programme by the Hon'ble Sri A. B. Shetty, Minister for Health, Government of Madras, on 8-6-1955 at the Corporation Stadium. The worshipful Mayor presided on the occasion. Out of the 1 unit of the N.M.C.P. for urban areas allotted to the Madras State under the First Five Year Plan of the Government of India, 0.6 unit has been given to the Corporation of Madras. As a result, the Madras Corporation gets Rs. 3.4 lakhs worth of assistance for the operational period of 2½ years in the shape of trucks, D.D.T. antimalarial drugs, etc. This scheme is intended for anti-adult work in the malaria affected areas of the city as supplement to the general anti-larval measures carried on by the Corporation. An Entomologist whose services have been lent by the Director of Public Health, Madras State, is in charge of it.

The year marked the beginning of a much needed change in the water works system. The foundation stone for the rapid gravity

mechanical filters was laid on 14-11-1955 by the President of India. Chemical treatment, flocculation and mechanical filtration are the important features of the new system of water treatment.

The prevention of food adulteration work received a fresh impetus by the coming into force of the Central Prevention of Food Adulteration Act in place of the Madras Prevention of Food Adulteration Act. The new Act is in enforcement in the City from 1-6-1955 and provides for heavy fines and imprisonment. The need for deterrent punishment stressed in the previous years for the effective prevention of the evil habit of adulterating food stuffs has been met by the enforcement of the new Act. The levy of heavy fines and imprisonment as laid down in the new Act, it is hoped, will prove effective in checking the unsocial tendency on the part of unscrupulous food vendors to adulterate articles of food.

The care of mothers and children through the child welfare centres was further extended during the course of the year under review. Three more child welfare centres were opened and the sub-centre at Ayana-varam was converted into a maternity home with 50 beds. In addition to the 4 part-time family planning clinics, 6 full-time clinics were opened on 11-8-1955 by the Hon'ble Sri A. B. Shetty, Minister for Health, Government of Madras. This was done in pursuance of the resolution of the City Council deciding to accept the grant-in-aid of the Central Government for the implementation of the family planning programme recommended by the Family Planning Research Committee.

Before concluding, I thank the Commissioner for his able guidance and helpful attitude during the year and the Asst. Health Officers, Lady Superintendent, C.W.S., and other members of the staff for the good and sincere work done by them during the year.

MADRAS, }
8-10-56. }

B. V. SUNDARA BABU, M.B.B.S., D.P.H., (CAL.),
Health Officer.

FORWARDED

The health of the city, as revealed by the report on the vital statistics for the year 1955, can be considered satisfactory. During the year, 66,449 live births were registered in the city, with a birth rate of 40.26 per mille of the estimated mid-year population, against 59,256 births with a birth rate of 37.12 per mille in the year 1954, which shows an increase in the birth rate. The total number of deaths registered during the year 1955 was 34,264 against 33,181 in the previous year. There was a slight fall in the death rate from 20.78 per mille in 1954 to 20.76 in 1955, the lowest rate recorded so far in the city. The infant mortality rate showed an increase from 136.00 per 1000 live births in 1954 to 143.22 in 1955. The gratifying feature was that the maternal mortality rate also showed a fall from 2.47 per 1000 live and still births in 1954 to 2.34 in 1955.

The rates of mortality from small-pox, enteric fever, malaria and respiratory diseases were less than those for the previous year. The city was free from epidemics and there was no case or death from cholera.

The Corporation Tuberculosis Clinic at Pulianthope continued to render useful service and as many as 9,862 new patients sought the opinion and advice of the clinic during the year. Sri Thiruvotteeswarar Tuberculosis Hospital at Otteri maintained by the Corporation showed all round progress.

Medical inspection of pupils studying in the Corporation schools was conducted, as usual, by the Medical Inspectors. 15,098 boys and 12,375 girls were examined by them during the year. Shark liver oil and calcium lactate were given to the under-nourished children. As the number of Corporation schools and the number of children studying in them have been

steadily increasing year after year, with no corresponding increase in the complement of Medical Inspectors, the need for additional staff was keenly felt and a proposal to appoint honorary staff for medical inspection is under consideration.

The Public Health Laboratory, the Public Analyst Laboratory, the Water Analyst Laboratory and the Malaria Laboratory continued to do useful work.

The Corporation Zoo celebrated its Centenary during the year and it was a landmark in the history of the Zoo. The celebration attracted large number of people besides some foreigners.

The year witnessed the inauguration of the National Malaria Control Programme sponsored by the Government of India under the First Five year Plan. It is expected that the scheme may prove beneficial.

The Maternity and Child Welfare Centres continued to render useful services during the year. There were 37 Child Welfare Centres at the end of the year and 17 of them have maternity wards with a total strength of 234 beds. Serological examination of blood of antenatal cases was conducted in 10 centres. All positive cases were given free treatment with penicillin supplied by UNICEF. Of the total number of 66,449 births in the city, 32,285 labour cases came under the care and observation of the Child Welfare Scheme and 16,088 births were conducted in the Corporation maternity wards during the year. These figures go to show the good work done by these centres.

Efforts are being made to introduce blood testing in all the Child Welfare Centres. Cow's milk was continued to be supplied to indigent and under-nourished infants in all the centres. The three Creches at Broadway, Royapuram and Chetpet maintained by the Child Welfare Scheme continued to be popular.

The four Family Planning Clinics maintained by the Child Welfare Scheme continued to render useful advice. With the grant of aid from the Central Government, the City Council decided to open 6 more full time Family Planning Clinics in the city and accordingly 6 full time Family Planning Clinics were opened on 11-8-1956 in various places by the Hon'ble Minister for Health. All these newly opened full time Clinics are fully equipped and are manned by full time staff. 16,192 persons were advised on the family planning.

Before closing I wish to place on record the good work done by the Health Officer, Sri Ranganathan, who has since retired and his Assistants and also the Lady Superintendent, Child Welfare Scheme, during the year.

MADRAS, }
25-10-1956. }

D. BALASUNDARAM, I.A.S.,
Commissioner.

VITAL STATISTICS-1955

Summary

Area		31900·9920
		Acres or
	...	49·84 Sq. miles.
Population as per Census of 1951	...	14,16,056
Population estimated (mid-year) 1955	...	16,50,433
Population calculated on the basis of excess of births over deaths since 1951	...	15,21,476
Average Density per Acre	...	51·74
Births excluding still-births	...	66,449
Birth rate per 1000 estimated population	...	40·26
Birth rate per 1000 on the excess of births over deaths	...	43·67
Deaths excluding still births	...	34,264
Death rate per 1000 estimated population	...	20·76
Death rate per 1000 on the excess of births over deaths	...	22·52
Natural increase	...	32,185
Rate of natural increase per 1000 of estimated population.		19·50
Still births	...	2,414
Still birth rate per 1000 births (live & still)	...	35·05
Infant deaths	..	9,517
Infant death rate per 1000 live births	...	143·22
Maternal Deaths	...	161
Maternal death rate per 1000 live and still births	...	2·34

Deaths from Principal Causes

Principal Causes	Deaths registered	Death rate per 1000 of estimated population.
Cholera	nil	...
Small-Pox	37	0·02
Enteric Fever	182	0·11
Malaria	75	0·05
Dysentery & Diarrhoea	5,180	3·14
Tuberculosis including tubercle of lungs	442	0·27
Respiratory diseases	8,142	4·93

Public Health of the City of Madras in 1955

The salient features of the state of public health in the City of Madras during 1955 as revealed by the Vital statistical records of births & deaths may be summarised as follows :

(1) An increase of 7.29 inches in the rain-fall for the year over that of the previous year.

(2) An increase in the birth rate from 37.12 per mille in 1954 to 40.26 per mille in 1955.

(3) A decrease in the death rate from 20.78 per mille in 1954 to 20.76 per mille in 1955, the lowest rate to be recorded so far in the City.

(4) An increase in the rate of natural increase from 16.33 in 1954 to 19.50 per mille in 1955.

(5) A decrease in the maternal mortality rate from 2.47 in 1954 to 2.34 in 1955.

(6) The rates of mortality from small-pox, enteric fever, malaria and respiratory diseases were less than those for the previous year. The city was free from epidemics, and no case or death occurred from cholera. The health of the city may therefore be considered more satisfactory during the year under report than it was in the previous year.

Vital Statistics

Area :—The area of the City is 49.84 Sq. miles or 31900.9920 acres.

Meteorology :—The atmospheric conditions recorded during the year 1955 are furnished in Vital Statistics Statement No. I in the Appendix.

Rainfall :—The total rainfall during the year was 51.64 inches—7.29 inches more than the rain fall in the preceeding year and 13.37 inches more than the average rain fall for the previous five years (1950-54). The rainfall recorded in the City in each quarter during the last five years and the year under report is furnished below :

Year	First Quarter	Second quarter	Third quarter	Fourth quarter	Total fall in inches.
1950	1.26	4.42	18.74	12.09	36.51
1951	0.16	5.42	11.76	13.31	30.65
1952	0.79	16.74	6.49	18.19	42.21
1953	1.42	0.82	10.01	25.38	37.63
1954	1.06	0.29	18.72	24.28	44.35
1955	4.81	10.17	15.37	21.29	51.64

Population :—The population of the City according to the census of 1951 was 14,16,056 (7,37,013 males and 6,79,043 females). The estimated mid-year population for the year 1955 was 16,50,433. The average density of population per acre was 51.74. In calculating the rates for births, deaths and other causes, for the various statistical statements in the report the mid-year population has been adopted. The Government of Madras in their review on the Administration Report for 1954 have recommended the suggestion of the D. P. H. that the rates of vital statistics may be calculated on the basis of the number of excess births over deaths in the City.

Accordingly the rates on the various statistical statements in the report have been worked out on this basis as well in addition to those based on the estimated mid-year population.

Registration of Births & Deaths

Registration of births and deaths is compulsory in the City from 1st April 1868. This is done in 30 registration centres spread all over the city by trained full time birth and death registration clerks under the supervision of five Medical Officers. The deaths occurring in the State hospitals, nursing homes, Clinics and Child Welfare Centres under the Corporation of Madras were reported by the respective authorities in prescribed forms supplied to them. Births and deaths occurring in residences were reported by the concerned parties themselves at the respective Registration Centres. Birth and death reports received from the Hospitals, Nursing Homes, etc. were still found to be defective even in spite of repeated requests to furnish the reports correctly. As usual the Vaccination staff verified births registered, within 7 days from the date of registration. Several discrepancies had to be corrected during such verifications as well as while issuing extracts of births and deaths.

During the year 215 births and deaths not registered in time were subsequently registered after the parties responsible for the default had been warned. 7 persons were prosecuted for not registering births or deaths during the year.

Births and Birth Rates :—The total number of births registered during the year was 66,449, i.e., 7,193 births more than the births in the previous year and 8,842 births more than the birth average for the previous five years (1950–54).

A steady increase in the number of births from 1946 will be noticed in the statement of births & deaths furnished on page 4.

Of the total births registered in the City during the year, 4,357 births were among the mofussil residents who had come to maternity hospitals and nursing homes in the City for confinement.

Calculated on the estimated mid-year population, the birth rate was 40·26 per mille against 37·12 in 1954, the average rate of the previous five years (1950–54) being 41·53.

The birth rate for the city for 1955 calculated on the basis of excess of births over deaths since 1951 was 43·67 per mille against 39·79 for the previous year.

Of the total births, 33,871 were males and 32,578 were females, i.e., 104 male births to every 100 female births. Excess of male births over female was recorded in 40 Municipal divisions.

The seasonal distribution of births during the year was as follows:—

Quarter months.	Births.	Percentage of quarterly births to total births.
1st Jany. 4,249	13,735	20·67
Feby. 4,209		
March 5,277		
2nd April 5,280	15,851	23·85
May 5,240		
June 5,331		
3rd July 5,508	18,033	27·14
Aug. 6,501		
Sept. 6,024		
4th Oct. 5,356	18,830	28·34
Nov. 6,245		
Dec. 7,129		
Total:	<u>66,449</u>	<u>100·00</u>

The births and the rates among the principal communities were as follows :—

Community.	No. of births registered.	Rate per 1000 census population in each Community.
Aliens	21	13·69
Anglo-Indians	272	20·53
Indian Christians	2,971	31·15
Muslims	5,534	39·44
Hindus	57,594	49·84
Others	57	5·80
Total :—	66,449	46·93

The number of births with the birth rates recorded in each division in the city is furnished in Vital Statistics Statement No. II in the appendix.

Still Births:—The number of still births registered during the year was 2,414 against 1,573 in 1954. This represented a rate of 35·05 for 1000 (live and still births) compared with a rate of 25·86 for the previous year.

Deaths & Death Rate:—The total number of deaths registered during 1955 was 34,264, i.e., 1,083 deaths more than the number of deaths for the previous year and 5,917 deaths less than the average number of deaths for the quinquennium. (1950–54)

The death rate calculated on the estimated mid-year population was 20·76 per mille as compared with 20·78 per mille in 1954, the average rate for the previous five years (1950–54) being 29·14. The death rate recorded during the year is the lowest to be recorded so far in the City. The total mortality includes the deaths of 2,572 persons who came to the city for treatment and died in the various Hospitals, Clinics, Nursing Homes, etc. during the year. Deaths occurring among cases of infectious diseases admitted into the infectious diseases Hospital, Tondiarpet from the adjoining district of Chingleput were also registered in the City. The death rate calculated on the basis of excess of births over deaths in the City since 1951 was 22·52 per mille against 22·28 in 1954.

An excess of 32,185 births over deaths was recorded against 26,075 in the previous year. The rate of natural increase was 19·50 per mille of the estimated population against 16·33 in 1954, and this rate for the year is the highest to be recorded so far.

A statement of births and deaths recorded in the city from 1946 is furnished below with special reference to the excess of births over deaths. It will be seen that this excess over deaths has been an annual feature continuously recorded from 1946.

Year.	Births	Deaths	Natural increase (+) or decrease (—)
1946	41,874	27,381	+ 14,493
1947	40,753	29,979	+ 10,774
1948	50,222	31,002	+ 19,220
1949	52,362	32,639	+ 19,723
1950	52,619	38,726	+ 13,893
1951	58,961	42,039	+ 16,922
1952	62,921	43,207	+ 19,714
1953	54,277	43,753	+ 10,524
1954	59,256	33,181	+ 26,075
1955	66,449	34,264	+ 32,185

DIAGRAM
 ANNUAL BIRTH AND DEATH RATE IN MADRAS CITY
 BIRTHS ————— 1930-1955 DEATHS —————



SCALE: $\frac{1}{5}$ INCH = 1 YEAR

SCALE: 1 INCH = 10 NUMBERS

Seasonal Variations:—The distribution of deaths during the different quarters of the year was as follows :—

Quarter.	No. of deaths.	Percentage of quarterly deaths to total deaths.
1st Quarter	8,576	25·03
2nd „	8,397	24·51
3rd „	8,554	24·97
4th „	8,737	25·49
Total	34,264	100·00

The number of deaths registered in each division with the death rate is furnished in Vital Statistics Statement No. V in the Appendix.

Deaths and rates in principal communities :—The principal communities recorded the following deaths and death rates during the year.

Community.	Deaths	Rate per 1000 of census population in each community.
Aliens ...	5	3·26
Anglo-Indians ...	101	8·00
Indian Christians ...	1,499	15·71
Muslims ...	3,445	24·55
Hindus ...	29,200	25·27
Others	14	1·4
All communities ...	34,264	24·20

Vital Statistics Statement No. XI in the Appendix furnishes the number of births and deaths with rates among the principal communities in the city during the year as compared with the figures for the previous year.

Sex and age distribution of deaths :—Of the total deaths registered during the year, 17,318 deaths were among males and 16,946 deaths among females. As usual, male deaths predominated over female deaths. There were 102 male deaths for every 100 female deaths against 109 to 100 in the previous year.

Excess of male deaths over female deaths was recorded in 29 municipal divisions. The excess of deaths over births recorded in division 28 was due to the deaths among non-residents admitted into the Government General Hospital during the year.

The specific death rates among males and females were 23·5 and 24·9 per mille respectively of the census population.

The statement below gives the number of deaths among the Various age groups and the percentage of deaths to the total mortality in each age group.

Age Group.	No. of deaths.	Percentage to total deaths.
Under one year	9,517	27·77
1 year and under 5 years	7,434	21·70
5 years „ 10 „	1,313	3·83
10 „ „ 15 „	507	1·48
15 „ „ 20 „	626	1·83
20 „ „ 30 „	2,049	5·98
30 „ „ 40 „	2,072	6·05
40 „ „ 50 „	2,142	6·25
50 „ „ 60 „	2,543	7·42
60 „ and upwards	6,061	17·69
Total :	34,264	100·00

As in the previous years the highest rates were recorded in the two extreme groups of age and the lowest in the age groups of 10 to 15 years. Vital Statistics Statement No. VIII in the Appendix furnishes the deaths registered in each Division according to sex and various age groups during the year.

Infant Mortality:—There were 9,517 infant deaths during the year giving an infant mortality rate of 143·22 per 1000 live births compared to 8,059 infant deaths with a rate of 136·0 in the previous year. The rate for the previous five years (1950-54) was 166·88.

The average infant mortality rates recorded in the City during the past five decades are given below :

Years.		Average infant Mortality
1915-1924	...	290·00
1925-1934	...	256·03
1935-1944	...	226·79
1945-1954	...	174·14
1955	...	143·22

It will be seen from the above that the infant mortality rate has progressively decreased during the five decades.

Of the total number of infant deaths 5,089 occurred among male children and 4,428 among female children, the male deaths to female deaths ratios being 115 : 100.

The infant mortality among the different age groups during the year was as follows :

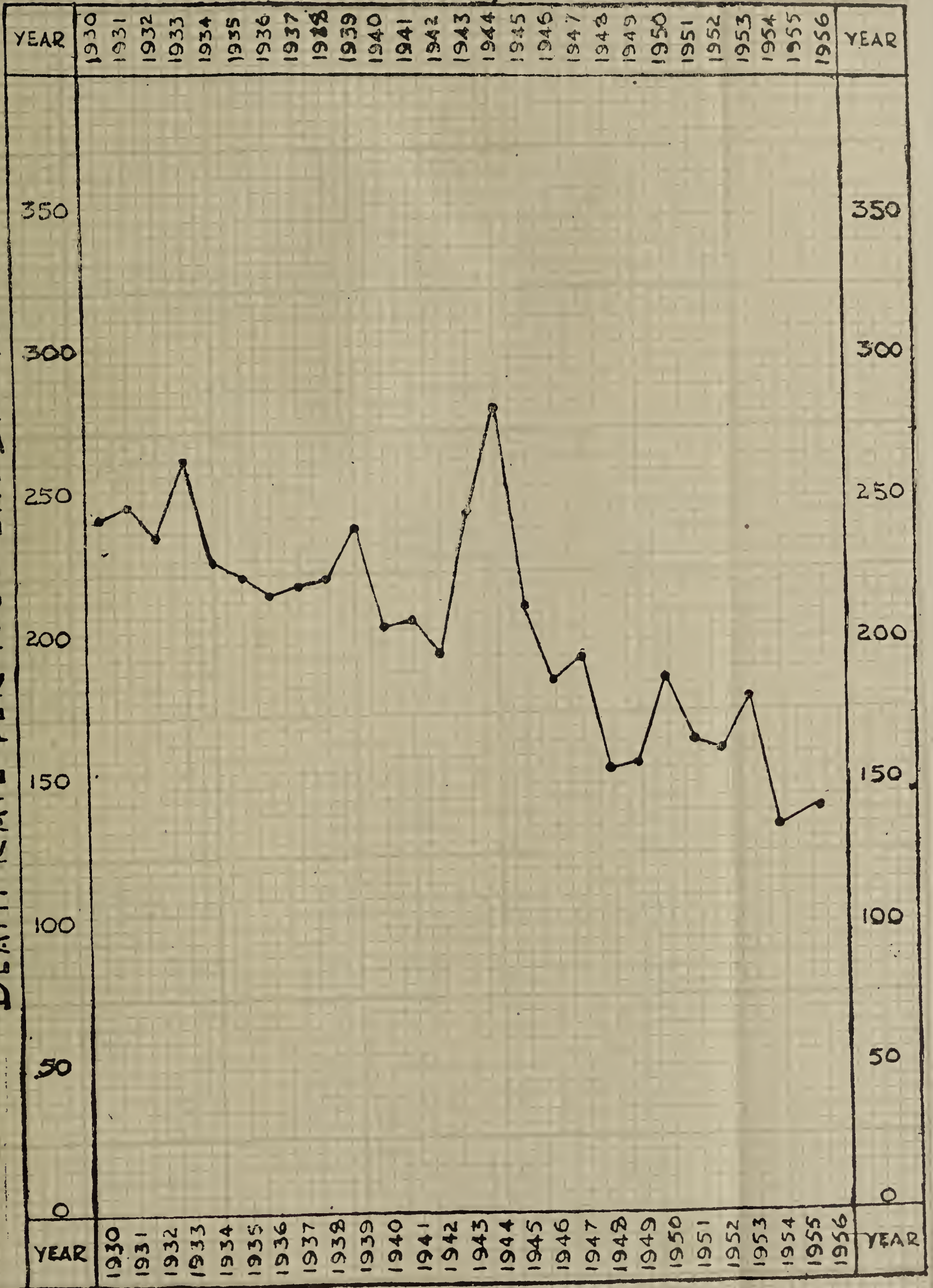
Age Groups.	No. of Infant Deaths.	Percentage to Total Infant Deaths
Under 7 days	2,385	25·06
7 days and under 1 month	1,370	14·39
1 month and under 6 months	3,325	34·94
6 months and under 1 year	2,437	25·61
Total :	<u>9,517</u>	<u>100·00</u>

The infant mortality and its rate among the principal communities were as follows :

Community.	No. of live births registered.	No. of infant deaths.	Infant mortality rate per 1000 live births registered
Aliens	... 21	nil	nil
Anglo Indians	... 272	12	44·12
Indian Christians	... 2,971	306	103·00
Muslims	... 5,534	1,047	189·01
Hindus	... 57,594	8,148	141·47
Others	... 57	4	70·20
Total :	<u>66,449</u>	<u>9,517</u>	<u>141·22</u>

DIAGRAM ANNUAL INFANTILE MORTALITY RATE IN MADRAS CITY 1930-1956

DEATH RATE PER 1000 LIVE BIRTHS



SCALE: 1 INCH = 50 NUMBERS

SCALE: 1/5 INCH = 1 YEAR

The number of infant deaths registered in each division with infant mortality rate is furnished in Vital Statistics Statement No. V in the Appendix. 30 municipal divisions returned rates less than the annual infant mortality rate for the whole city. The lowest rate, of 94.4 was recorded in the 45th division (Mylapore South). High rates of infant deaths were noticeable in the congested divisions and where the poorer and labouring classes are prepondarent. Vital Statistics Statement No. X in the Appendix gives the number of infant deaths with rates registered in each month during the year compared with the figures for 1954.

Causes of Infant Deaths:—Vital Statistics Statement No. XIII in the Appendix furnishes the deaths of infants under one year from principal causes. 3,213 deaths or 33.76 per cent of the total infant deaths were due to premature birth and infantile debility and 2,799 deaths or 29.41 per cent of the total infant deaths were due to respiratory diseases. Dysentery and diarrhoea caused 1,418 deaths giving a per centage of 14.90 to total infant deaths. 519 deaths were due to convulsions and 432 deaths due to fevers. There were only 10 deaths due to small pox against 40 deaths in the previous year.

Principal Causes of Deaths

A comparative table showing the principal causes of deaths with rates in 1954, 1955 and the quin-quennium (1950–54) is set forth below.

Causes of deaths	Number of deaths in		Rate per 1000 Estimated mid- year population		Average rate for the previous 5 years (1950—54)
	1955	1954	1955	1954	
Cholera	...	7	...	0.004	0.12
Small-pox	37*	305	0.02	0.20	0.32
Diarrhoea & dysentery	5,180	4,534	3.14	2.89	3.92
Measles	...	5	...	0.003	0.002
Enteric fever	182*	234	0.11	0.15	0.18
Malaria	75	105	0.05	0.07	0.13
Other fevers	3,191	3,115	1.93	2.00	2.53
Tubercle including tubercle of lungs	442	403	0.27	0.25	0.48
General respiratory diseases	8,142	8,198	4.93	5.14	6.84
Injuries	497	488	0.30	0.31	0.33
Deaths from child birth	161	150	0.10	0.10	0.10
All other causes	16,357	15,637	9.91	9.80	14.21
Total:	34,264	33,181	20.76	20.78	29.14

* Includes deaths of non-residents among mofussil cases admitted into the City hospitals.

Compared with the previous year, the mortality rate from principal causes was less under small-pox, enteric fever, malaria, other fevers, general respiratory diseases and injuries. It will also be seen that the rates of death from all the principal causes were less than the average rates for the quinquennium (1950—54).

The causes of deaths are discussed in detail below :

Plague :—The City continued to be free from plague.

Cholera :—No case of cholera was recorded in the City during the year. The City continued to be free from cholera since March 1954 except one case reported in December 1954. Preventive measures such as disinfection, isolation and inoculation of contacts, etc. were promptly adopted in all suspicious cases notified. During the year 24,996 persons were inoculated with anti-cholera vaccine.

Attacks and deaths from cholera recorded in the City since 1946 are shown below :—

Year	Attacks	Deaths
1946	2	1
1947	29	2
1948	1,175	192
1949	429	36
1950	1,139	183
1951	1,220	186
1952	975	160
1953	3,872	602
1954	39	4
1955	nil	nil

This is the first year in which no case of cholera has been recorded in the City after the inclusion of the added areas in 1946 with Madras proper.

Small-pox :—The City was also practically free from small-pox during the year. 167 cases and 28 deaths were recorded in the city against 1,214 attacks and 277 deaths reported in 1954. During the year 34 cases were admitted into the Infectious Diseases Hospital, Tondiarpet, from the adjoining district of Chingleput for isolation and treatment. 9 cases of these proved fatal.

28 deaths from small-pox registered in the City during the year under report give a death rate of 0.02 per mille of the estimated population as compared with 0.17 per mille in the previous year, the quin-quennial (1950–54) average being 0.29.

The death rate for small-pox for 1955 calculated on the basis of excess of births over deaths in the City since 1951 was the same rate as that based on the estimated mid-year population.

Deaths from small-pox accounted for 0.1 per cent of the total mortality.

Attacks and deaths recorded during each quarter of the year were furnished below :

Period	From the City		Cases brought from Chingleput District	
	Attacks	Deaths	Attacks	Deaths
1st Quarter	117	22	27	4
2nd „	39	5	3	3
3rd „	6	1	3	2
4th „	5	nil	1	nil
Total	167	28	34	9

Prompt preventive measures were adopted in all cases notified or detected. All the cases were hospitalised.

The incidence of small-pox for a period of ten years is given below :

Year	Attacks	Deaths
1946	872	169
1947	128	20
1948	82	12
1949	1,045	171
1950	4,432	882
1951	2,348	449
1952	647	122
1953	517	96
1954	1,214	277
1955	167	28

Vital Statistics Statement No. IX in the Appendix gives the number of deaths recorded in each division during the year.

Vaccinations and re-vaccinations performed during the year are given in a separate report. The number of small-pox cases isolated and treated during the year is given in the report of the Infectious Diseases Hospital, Tondiarpet.

Measles :—364 cases from Measles were registered in the city during the year. There was no death from it. 25 cases were admitted into the Infectious Diseases Hospital, Tondiarpet, during the year from the adjoining district of Chingleput and all of them were cured and discharged.

Typhoid or Enteric Fever :—1,490 cases were notified during the year against 1,140 cases in the previous year. 155 cases of these proved fatal with a death rate of 0.10 per mille of the estimated population as compared with 201 deaths and a death rate of 0.13 per mille in the preceding year, the quin-quennial average being 0.15 per mille. The death rate for enteric fever for 1955 on the basis of the number of excess of births over deaths was the same rate

Enteric fever is endemic and was prevalent in the city all the year round.

The statement below furnishes the incidence during each quarter of the year.

Period	City		Cases admitted from the adjoining district of Chingleput	
	Attacks	Deaths	Attacks	Deaths
1st quarter	433	45	83	9
2nd quarter	322	38	67	9
3rd quarter	325	29	93	6
4th quarter	410	43	92	3
Total :	<u>1,490</u>	<u>155</u>	<u>335</u>	<u>27</u>

Preventive measures such as disinfection and inoculation were promptly adopted in all notified cases. Notification of this disease by hospitals, nursing homes and private Medical Practitioners continued to be very poor. All the cases notified to this department have not bacteriologically proved positive cases. Some were clinical cases and some of them proved to be negative on subsequent verification by the Health Staff on receipt of the intimation slips. The response from the public to get themselves protected against the disease was also unsatisfactory. During the year, 13,175 persons were inoculated with anti-typhoid vaccine.

Cases and deaths recorded from enteric fever during each year in the City since 1946 are furnished below :—

Year	Cases	Deaths
1946	523	107
1947	647	140
1948	520	118
1949	777	167
1950	801	187
1951	810	214
1952	955	235
1953	1,064	186
1954	1,140	201
1955	1,490	155

Vital Statistics Statement No, IX in the Appendix furnishes the number of deaths recorded in each division during the year. Deaths from enteric fever accounted for 0.5 per cent of the total mortality.

Malaria :—75 deaths from malaria were registered as compared with 105 deaths in 1954. The death rate per mille of the estimated population was 0.05 against 0.07 per mille in the previous year. The quin-quennial (1950-54) average rate was 0.13. The death rate on the basis of excess of births over deaths was also the same rate.

Deaths from Malaria accounted for 0.2 per cent of the total mortality in the City.

Vital Statistics statement No. IX in the Appendix gives the number of deaths from Malaria in each division.

Anti-mosquito measures taken are given in a separate report.

Kalaazar :—During the year 204 cases with 23 deaths were registered from Kalaazar in the City. The death rate was 0.01 per mille against 0.02 in 1954.

Kalaazar has been declared a notified infectious disease in G.O.Ms. No. 480 H dated 7-2-55 under Sections 52 and 62 of the M.P.H. Act. The incidence of the disease during each quarter of the year was as follows :—

Period	Cases	Deaths
1st quarter	43	13
2nd „	64	2
3rd „	64	6
4th „	33	2
Total	204	23

Besides these 26 cases were admitted into the hospitals in the City from the adjoining district of Chingleput for treatment and 6 of these proved fatal.

Preventive measures were adopted in respect of every case notified.

Deaths from Kalaazar recorded in each division are furnished in the Vital Statistics Statement No. IX in the Appendix.

'Other Fevers':—The mortality from 'Other fevers' recorded during the year was 3,191 with a rate of 1.93 per mille of the estimated population against 3,115 deaths and a death rate of 2.00 per mille in 1954 and 3,554 deaths with a death rate of 2.53 on an average in the last quinquennium (1950-54). The death rate recorded during the year under report was the lowest rate. The death rate on the basis of excess of births over deaths was 2.1 per mille. Deaths under this group accounted for 9.3 per cent of the total mortality against 9.4 in 1954.

The seasonal distribution of deaths is shown below :

Period	Deaths
1st quarter	805
2nd „	816
3rd „	759
4th „	811
Total	3,191

Vital Statistics Statement No. IX in the Appendix gives the number of deaths registered in each division during the year.

Diarrhoea & Dysentery:—5,180 deaths from diarrhoea and dysentery were registered in the City during the year with a death rate of 3.14 per mille of the estimated population against 4,534 deaths and a death rate of 2.84 per mille in the previous year and the quin-quenniel (1950-54) average of 5,474 deaths and a death rate of 3.92 per mille. Diarrhoea and dysentery accounted for 15.1 per cent of the total mortality in the City.

The death rate on the basis of excess of births over deaths was 3.40 per mille.

Mortality from Diarrhoea and dysentery during the different quarters of the year was as follows:—

Period	Deaths
1st quarter	1,332
2nd „	1,178
3rd „	1,396
4th „	1,274
Total	5,180

Vital Statistics Statement No. IX in the Appendix furnishes the number of deaths registered in each division during the year.

Tuberculosis including tubercle of lungs:—442 deaths were recorded during the year against 403 deaths in the previous year. The death rate calculated on the estimated population was 0.27 per mille against 0.25 in 1954 and 0.48 which is the average rate for the past five years (1950-54). The death rate calculated on the basis of excess of births over deaths was 0.29 per mille.

The deaths from this cause accounted for 1·3 per cent of the total deaths in the City. There were six deaths at the Corporation Sri Tiruvateeswarar Tuberculosis Hospital during the year.

The Government Tuberculosis Institute at Spur Tank Road and the other clinics in the City notified all cases of tuberculosis that came under their care. The health staff inspected the houses of all notified cases and disinfected the houses and the surroundings and gave instructions to the contacts about the prevention of the disease and persuaded them to get themselves examined and treated. Pamphlets on tuberculosis with special reference to its prevention were distributed to them.

The health Visitors attached to the Tuberculosis Clinics in the city visited the houses of the patients and advised the patients and their relatives as to the care of sputum and the need for ventilation, diet, clean clothing and general sanitation. The health Visitors visited the patients and the contacts in their houses from time to time as part of their follow up work.

Though tuberculosis is a notified disease under the Madras public Health Act, notification by private medical practitioners still continues to be poor.

Details of cases treated at the Corporation Tuberculosis Hospital and at the several Clinics are furnished separately in the Report.

Vital Statistics Statement No. IX in the appendix gives the number of deaths registered from Tuberculosis during the year.

General Respiratory Diseases :—8,142 deaths under this group of diseases were registered during the year with a death rate of 4·93 per mille of the estimated population against 8,198 deaths with a death rate of 5·14 per mille in the previous year. The average deaths and the death rate for the quin quennium (1950–54) were 9,439 and 6·84 per mille respectively. The death rate recorded during the year is the lowest for the City so far. The death rate calculated on the basis of excess of births over deaths was 5·35 per mille.

Deaths under this cause accounted for 23·8 per cent of the total mortality against 24·7 percent in 1954.

The distribution of mortality during the 4 quarters of the year was as follows :—

Quarter	Deaths
1st quarter	2,158
2nd „	2,246
3rd „	1,948
4th „	1,790
Total	<u>8,142</u>

Vital Statistics Statement No. IX in the Appendix furnishes the number of deaths registered under this cause in each division during the year. More deaths had occurred in the divisions which are congested and where the poor and labouring classes live in poverty and defective housing conditions.

Injuries :—497 deaths from 'Injuries' were registered during the year with a death rate of 0·30 per mille against 488 deaths and a death rate of 0·31 in the previous year. The quin-quennial average rate was 0·33 per mille. The death rate based on the excess of births over deaths was 0·32 per mille.

Deaths from injuries accounted for 1·5 per cent of the total mortality

Vital statistics Statement No. IX in the Appendix furnishes the number of deaths from 'injuries' registered in each division during the year

As reported in the previous year, it has to be repeated that the death reports for all inquests conducted by the Police Officials are not being furnished in the prescribed form as required under the rules framed for the registration of births and deaths.

Maternal Deaths :—During the year, 161 Mothers died due to child bearing as compared with 150 mothers in the previous year. The maternal death rate during the year was 2·34 per thousand live and still births against 2·47 in 1954 and the quin-quennial average rate of 2·46. The maternal deaths registered during the year are classified below according to age-periods and principal causes of death.

Principal Causes	Under 20 years	20 and 30 years	30 and 40 years	40 and above	Total	Percentage to total deaths from child birth
Puerperal sepsis	4	12	11	1	28	17·4
Abortion	6	9	9	2	26	16·1
Other accidents and diseases of pregnancy	20	44	38	5	107	66·5
Total	30	65	58	8	161	100·00

Vital Statistics Statement No. IX in the Appendix furnishes the number of mothers who died due to child bearing in each division during the year.

The Statistics relating to the deaths of mothers who came under the care of the various Clinics of the Child Welfare Scheme are given in a separate report by the Lady Superintendent, Corporation Child Welfare Scheme.

Certified Deaths :—During the year 8,425 deaths were certified by the various hospitals, clinics and Institutions in the City. 1,079 deaths were certified by the private medical practitioners as to the causes of death. The certified deaths represented 28 per cent of the total deaths during the year. Sub-Assistant Health Officers in charge of Registration of Births and Deaths verified the causes of deaths in suspicious and doubtful cases. The number of deaths certified by private Medical Practitioners continued to be low. The need therefore for making certification of deaths compulsory has to be stressed as in the previous years.

Extracts of Births & Deaths :—Extracts of births and deaths from the birth and death Registers were furnished on requisition and on payment of the prescribed fees. During the year 3,000 applications for extracts of Births and Deaths were received of which 2,428 extracts were issued. Extracts could not be furnished in 478 cases due to incorrect particulars furnished or want of entries in the registers. 94 applications were pending disposal at the end of the year.

V A C C I N A T I O N

Vaccination was done in 31 public Vaccination Centres under the immediate supervision of Five Medical Officers designated as Sub-Assistant Health Officers, each in charge of 10 Divisions, assisted by 80 Vaccination Inspectors—including 8 Lady Vaccinators) and 27 Birth and Death Registration Clerks. The latter were also trained in vaccination work and they performed vaccinations in the Vaccination Depots during the absence of the Vaccination Inspectors from the Depots. Vaccination was also made available at the Corporation Dispensaries and at the Child Welfare Centres. Medical Inspectors performed vaccination in the Corporation Schools. Sanitary Inspectors did vaccinations among the contacts of small-pox cases as well as suspicious causes, during house inspections and they were also responsible for the protection of those employed in licensable trades. Vaccinations and inoculations were also done at the Vital Statistical Section of the Health Department at the Ripon Buildings between 11 a.m. and 5 p.m. on all working days for the convenience of those requiring such services urgently during the non-working hours of Vaccination Depots. During the year 170 revaccinations and 164 inoculations were performed.

During the year, the Vaccination staff contacted the parents of babies born in the city for the compulsory vaccination of their babies under the bye-laws framed under Section 349 (26) of the Madras City Municipal Act. By intensive house to house inspections they were able to detect 10,332 babies born in the mofussil and brought to the city without being vaccinated.

52,085 Primary Vaccinations and 2,41,202 Re-vaccinations were performed in the city during the year against 50,148 Primary and 3,59,628 Re-vaccinations performed in the previous year.

The success rate was 99.9 per cent in Primary Vaccination and 4.6 per cent was the reaction rate in Re-Vaccination during the year against the respective rates of 99.9 per cent and 4.8 per cent for the previous year.

The statement below furnishes the number of Primary and Re-vaccinations performed in the City, each year, from 1946.

Year	Primary Vaccinations	Re-vaccinations	Total Vaccinations
1946	33,517	2,95,226	3,28,743
1947	37,468	1,27,682	1,65,150
1948	36,250	97,565	1,33,815
1949	46,266	3,39,418	3,85,684
1950	56,804	9,05,402	9,62,206
1951	52,027	4,06,292	4,58,319
1952	52,518	2,37,951	2,90,469
1953	51,193	2,02,504	2,53,697
1954	50,148	3,59,628	4,09,776
1955	52,085	2,41,202	2,93,287

The downward trend in the re-vaccination figures for the year under review was due to the fewer cases of small-pox reported in the City. The Health Officer, the Assistant Health Officers and the Sub-Assistant Health Officers verified the results of vaccinated cases. During the year, the results of 37,991 primary vaccinations and 68,197 Re-vaccinations were verified by them. The remaining cases were verified by the Vaccination Inspectors themselves.

No serious ill-effects due to vaccination were observed or reported during the year.

The vaccination staff inspected each and every house in their area and examined the vaccinal conditions of each inmate and protected those who had not been protected with in the previous six years. Under Section 349 (26) of the Madras City Municipal Act, 192 persons were prosecuted for failure to get their children vaccinated and 8 persons for failure to get themselves re-vaccinated.

The statement below furnishes the vaccinal conditions of small-pox cases recorded by the Health staff during the year.

Age Period	Vaccinated as evidenced by at least by one successful mark.			Not vaccinated and vaccinated during incubation period or said to have been vaccinated but without successful marks.			TOTAL		
	Attacks	Deaths	Percentage of case mortality	Aattcks	Deaths	Percentage of case mortality	Attacks	Deaths	Percentage of case mortality.
Under one year	...	...	...	17	11	64·7	17	11	64·7
1 yr. & under 5 years	4	...	..	20	7	35	24	7	29·2
5 yrs. & under 10 years	...	...	...	20	3	15	20	3	15
10 „ „ 15 „	9	...	...	3	1	33·3	12	1	8·3
15 „ „ 20 „	22	...	...	8	5	62·5	30	5	16·6
20 „ „ 25 „	19	1	5·3	5	2	40	24	3	12·5
25 „ „ 30 „	28	...	...	3	1	33·3	31	1	3·2
30 „ „ 35 „	12	1	8·3	6	2	33·3	18	3	16·6
35 „ „ 40 „	8	...	...	3	...	...	11	...	...
40 „ „ 45 „	7	...	...	2	...	...	9	...	...
45 „ „ 50 „	...	...	...	1	...	...	1	...	...
50 years & above	2	...	...	2	2	100	4	2	50
Total ...	111	2	1·8	90	34	37·8	201	36	17·9

The total includes 34 small-pox cases admitted into the Infectious Diseases Hospital, Tondiarpet, from the adjoining district of Chingleput during the year and 9 deaths, which occurred among them.

International Certificates of Vaccination against small-pox and inoculations against cholera were issued for International Sea and Air traffic free of charges. During the year 7,429 certificates were authenticated with the approved stamp in the International forms. Some of them were issued to the public by Private Medical Practitioners who charged them for the purpose and their authentication had to be done after careful scrutiny free of cost. The Corporation was getting an annual income of about Rs. 25,000 by the levy of a nominal fee for the issue of certificates. But in pursuance of the direction of the Government of India, Ministry of Health, New Delhi, in their letter No. F. 12-5/52 P.H. dated 12-6-1954 certificates have to be issued or authenticated free of cost which resulted in the loss of revenue to the Corporation to the extent indicated above.

Students of the Sanitary Inspectors Course of the Madras Medical College and Stanley Medical College, Apprentice Physicians and Village Vaidya Trainees of the Govt. College of Indigenous Medicine, Kilpauk, and the students of the Christian Medical College, Vellore, were given training in vaccination during the year.

Details of Vaccinations performed in the City during the year are furnished in the statements appended to the report.

MEDICAL RELIEF

The year opened with 33 general dispensaries, 5 special clinics and 2 hospitals. During the course of the year two more general dispensaries of the allopathic system were opened, one at Muthialpet, 11th division, on 25-2-55 and the other at Chepauk, 40th division, on 23-2-55.

Out of the 35 general dispensaries, 27 were of the allopathic system and 8 of the indigenous system. Of the 5 special clinics, two were for leprosy, one for venereal and one for tuberculosis. Besides the Corporation tuberculosis clinic at Puliantope there were 4 tuberculosis clinics attached, one each to the 4 Government hospitals in the city. They were jointly maintained by the Corporation and the Government, the Corporation meeting the expenditure on establishment and the Government meeting the expenditure on medicine, accommodation, etc. The clinics continued to be under the direct control of the Director of the Government T.B. Institute at Egmore.

The Corporation maintained, as in the previous years, one tuberculosis hospital at Otteri and one infectious diseases hospital at Tondiarpet. The tuberculosis hospital continued to receive cases diagnosed at the Corporation Clinic and other institutions for institutional treatment. The infectious disease hospital continued to attend to the treatment of infectious cases occurring in the city as well as the adjoining district of Chingleput.

General Dispensaries :—During the year under report the general dispensaries attended to 16,01,715 new cases and recorded a total attendance (new and old cases) of 31,39,066 cases. The number of minor operations performed was 28,365. The newly opened dispensaries at Muthialpet and Chepauk attended to 30,919 and 38,680 new cases and registered a total attendance of 65,683 and 85,654 respectively. In the 8 dispensaries of the indigenous system there was a total attendance of 7,03,731 cases of which 3,49,963 were new cases. Detailed statements on the working of the dispensaries, clinics and hospitals will be found in the appendix to the report.

Mobile Dispensaries:—Of the two mobile medical units, the one inaugurated in 1953 continued to serve the needs of the poor living away from the dispensaries at Kodambakkam and Adyar while the other inaugurated in 1954 continued to render medical aid in the outlying areas of Perambur, Sembiam and Ayanavaram. The total number of cases treated was 25,188 of which 24,451 were new cases.

The Medical Officer of the Kodambakkam dispensary accompanied one of the vans on every Tuesday, Thursday and Saturday. On these days this van visited by turns Choolaimedu and Namchivayapuram, Kodambakkam cheri and Nallankuppam, Jaffarkhanpet and Mambalám cheri and treated 3,696 total cases of which 3,605 were new cases. The Medical Officer of the Adyar dispensary accompanied the van on Mondays, Wednesdays and Fridays. On these days this van visited by turns Alcotkuppam, Vanandurai and Damodarapuram, Kalikundram, Pallippet, Maduvankarai, Kottur cheri, Zamin Adyar and Varadapuram and treated 3,757 total cases of which 3,558 were new cases. The van was under repair from 28-5-55.

The other van accompanied by the Medical Officer of the Perambur dispensary on Wednesdays and Saturdays visited Erukancheri and Madavaram and the adjoining cheries and rendered medical assistance to 6,308 total cases of which 6,108 were new cases. On Tuesdays and Fridays it was accompanied by the Medical Officer of the Sembiam dispensary and it visited Kulathur village and Thandavaraya chatram and treated 5,360 total cases of which 5,208 were new cases. On Mondays and Thursdays the Medical Officers of the Ayanavaram dispensary accompanied the van to Naduvankarai, Arumbakkam, Sanarpalayam, Ponvelu Pillai thottam and Aminjikarai cheries by turns and treated a total of 6,067 cases of which 5,972 were new cases.

Skin and Leprosy Clinics:—The Corporation continued to maintain the two skin and leprosy clinics, one in Vysarpady and another at Triplicane. Their activities consisted of treating cases at the dispensaries, conducting survey, doing propaganda work and segregating infective cases. The out-turn of work in the clinics are detailed below:—

Institution	New cases of leprosy	New cases of skin diseases	Yearly attendance of skin and leprosy cases	No. of injections for leprosy	No. of injections for skin cases	Average monthly attendance
1. Vyasarpady clinic ...	969	3,537	33,583	18,289	23	2,799
2. Triplicane clinic ...	211	17,158	42,092	8,592	541	3,508

Each clinic was under the charge of a qualified Medical Officer, assisted by a Health Visitor and other ancillary staff.

The Medical Officer of the Vyasarpady clinic conducted a systematic survey of Kosapet (24th division) where the majority of people were illiterate workers and among whom skin affections were not uncommon. The Health Visitor contacted those irregular in attending the clinic and persuaded them to continue treatment till cure was permanently effected. In the survey done by the Medical Officer, he was handicapped by the absence of many of the male members who were away on work. However he was able to examine 68.4% of the enumerated population of the division.

The Medical Officer in charge of the Triplicane clinic carried out survey work in Thiruvateeswaranpet (39th division). Poor standard of living, concealment of open cases and non-segregation of infective cases accounted for the incidence of leprosy in the surveyed area. The Health Visitor made

regular house visits and prevailed upon indifferent patients to attend the clinic regularly and get cured.

The Central Leprosy Teaching and Research Institute at Thirumani in the Chingleput district has 36 beds reserved for the patients from the City. Cases examined in the Corporation clinics and requiring institutional treatment were recommended for admission into the Institute. The Corporation paid a capitation grant of Rs. 50 per bed per month for the beds utilised.

The School Medical Inspection Staff directed 367 cases of leprosy to the Vyasarpady Clinic and 122 cases of leprosy to the Triplicane Clinic for treatment. In this respect close co-operation was maintained between the Clinical Staff and School Medical Inspection Staff.

During the year Dr. Hemirjecks, M.D., Leprologist from Belgium and Dr. H. Jones from Nigeria visited the Vyasarpady clinic.

Detailed statement on the working of the clinics and the leprosy survey work conducted by the Medical Officers will be found in the appendix to the report.

Tuberculosis Clinic :—The clinic situated at 13, Pulianthope High Road, Pulianthope, was in its 12th year during the year under review and continued to meet the demands on its services particularly from its control area comprising Pulianthope, Choolai, Perambur, Sembiam, Kosapet, Vyasarpady and Ayanavaram.

9,862 new patients sought the opinion and advice of the clinic during the year.

The clinical and fluoroscopic examinations were done as a routine on every case.

Radiographic examinations were done as and when they were required for diagnostic and treatment purposes.

Laboratory examinations of sputums (up to concentration level), urine, blood, etc. were done in the laboratory attached to the clinic and the services of the Corporation Public Health Laboratory were utilised whenever required. Sorting and disposal of cases after diagnosis are detailed in the statements appended.

The Health Visitor of the clinic continued to be the essential link for contact examination, domiciliary supervision and treatment, and after care and advice on the prophylaxis in the houses.

References were received from the private medical practitioners in the city and they were attended to. In addition to the private practitioners, the Corporation dispensaries, B. & C. Mills dispensary, Social Centres like Ashok Vihar, Port Trust dispensary and Simpsons Medical Centre, availed themselves of facilities at the clinic for opinion and advice, regarding their patients.

A waiting list of patients suitable for hospital treatment was maintained as in the previous years. Each case in the list was considered on its merits and the urgency of admission to the Corporation Thiruvotteeswarar Tuberculosis Hospital, which provides for in-patient treatment in the Anti Tuberculosis Scheme of the Corporation of Madras.

Patients who had preliminary treatment at the clinic were recommended to the Government Tuberculosis Sanatorium at Tambaram for surgical interference.

11 patients recommended from its preventive control area for financial assistance received in aggregate to a sum of Rs. 220 per mensem from the City Tuberculosis Association of Madras.

Tuberculosis Control in the Clinics (Preventive Control Area)—This was possible through the medium of the Health Visitor. It was noticed that a good number of tuberculosis cases coming from outside the city and staying with their relatives in the control area, could not take any effective measures for isolation, and this contributed to the spread of infection. Advice on the methods of prophylaxis by the Medical Officer at the clinic and in the houses by the Health Visitor formed a regular feature of the activity of the clinic.

The Corporation B.G.G. team visited the clinic on two days in a week and the opportunity was availed of by the clinic for the benefit of the contacts and the children who attend the clinic for examination.

The following visited the clinic:—

1. Mr Macweeny, The Tuberculosis Advisor, South East Asia Region W.H.O. visited on 22-9-55.
2. Mr. Holmes of W.H.O. visited on 22-9-55.
3. Mr. W. Fox of the British Medical Council, London. visited on 12-11-55.

9,862 new cases were examined at the clinic and, 1,474 of these (14.9%) were diagnosed as having tuberculosis. Out of these, 1,331 (90.1) were pulmonary tuberculosis cases and the rest 143 (9.9%) were non-pulmonary tuberculosis cases.

Number of repeated cases during the year including tuberculosis and non-tuberculosis cases was 30,423.

Table A showing the number of cases examined and the number of tuberculosis cases among them during the last 5 years

Year.	No. of cases examined.	No. of cases diagnosed as pulmonary tuberculosis	No. of cases diagnosed as tuberculosis (non-pulmonary)	Total No. of cases diagnosed as tuberculosis	% age of tuberculosis cases examined
1951	7962	1332	64	1396	17.5%
1952	9814	1680	124	1804	18.4%
1953	10073	1422	140	1562	15.1%
1954	9275	1260	120	1380	13.1%
1955	9862	1331	143	1474	14.9%

Table B showing the daily average attendance during the last 5 years

Year	Daily average
1951	136
1952	150.5
1953	146.3
1954	140.9
1955	110.4

Statement showing details of pulmonary tuberculosis cases :—

Table “ A ”

P.T.	Stage	I	...	22
P.T.	„	II	...	31
P.T.	„	III	...	1,278
				<hr/> 1,331 <hr/>

Table “ B ” showing age group

Age group			No. of cases
1 to 5	years	...	36
6 — 10	„	...	20
11 — 15	„	...	31
16 — 20	„	...	151
21 — 25	„	...	274
26 — 30	„	...	282
31 — 35	„	...	150
36 — 40	„	...	132
41 — 45	„	...	100
46 — 50	„	...	76
51 — 55	„	...	46
56 — 60	„	...	22
60 years and above		...	11
			<hr/> 1,331 <hr/>

Table “ C ” Regional distribution

Area		No. of cases
Pulianthope	...	286
Choolai	...	265
Perambur	...	159
Sembiam	...	94
Kosapet	...	40
Vyasarpady	...	106
Ayanavaram	...	60
		<hr/>
Total diagnosed at the clinic	...	1,010

Cases transferred from other clinics 131 for purposes of Home visiting.

Total No. of pulmonary tuberculosis cases who attended the clinic from the preventive control area ... 1,141.

Number of cases belonging to other areas diagnosed at this clinic and transferred to other clinics for home visiting 321

Laboratory, Fluroscopic and Radio graphic Examination :—

No. of sputum examined	...	4937
Fluroscopic examination	...	11,839
Radiographs taken	...	870

Home visits by the Health Visitor and contact examination during the last 5 years:—

	1951	1952	1953	1954	1955
Primary home visits	1,069	1130	1002	869	935
Re-visits	205	212	256	214	253
Visits to discharged patients from the hospital for after care	298	255	392	297	318
Total visits by the Health Visitor	1,572	1,597	1,630	1,380	1,506
No. of contacts examined at the clinic at the instance of the Health Visitor during the last 5 years.	1,274	1,845	1,787	1,287	1,296

Out of 1,296 contact examinations, 1,195 contacts were from the clinic's preventive control area.

Table " A " P. T. among contacts

Among contacts in general			Among contacts from the preventive control area	
P. T. Stage	I	25		23
P. T. „	II	1		1
P. T. „	III	29		28
		<hr/> 55		<hr/> 52

Showing No. of Contacts tuberculin tested and B.C.G. Vaccinated

No. of contacts tuberculosis tested	...	1,106
„ „ positive	...	381
„ B.C.G. vaccinated	...	136
„ not responded for vaccination	...	575

Treatment of cases.

1. Artificial pneumothorax :—

(a) No. of cases for whom intial A. P. was tried at the clinic as out-patients	...	41
(b) No. of cases who got A. P. as continuation of treatment after discharge from the hospital and from other institutions	...	58
(c) No. of cases brought over from the previous years who continued A. P. at clinic (treatment done as out patient only)	...	15
Total No. of patients who had A.P. at the clinic		<hr/> 114

2.

(a) No. of cases in whom A.P. failed for want of free pleural space	...	...	5
(b) No. of cases for whom A. P. was abandoned at various stages during the year as being Ontraselective or on account of complications developing	...	...	17
(c) No. of A. P. cases who discontinued treatment against medical advice	...	...	2
(d) No of cases A. P. admitted into the hospital in a better condition for continuing treatment	...	...	21
(e) No. of cases for whom A.P. was adondoned during 1955 after improvement	...	...	24
(f) No. of cases carried over to 1956 for continuation of treatment	...	...	24
			<hr/> 93 <hr/>

3. *Pneumo-peritoneum* :—

(a) No. of cases for whom P. P. was induced at the clinic	...	...	52
(b) No. of cases for whom P. P. was continued at the clinic in continuation of treatment after discharge from the hospital or other sanatoria	...	...	47
(c) No. of cases brought over from the previous years who continued P.P. (Treatment done as out-patient only)	...	...	60
Total No. of P.P. cases			<hr/> 159 <hr/>
(d) No. of cases for whom P.P. was abandoned at various stages as being ineffective on account of complications setting in	...	...	26
(e) No. of cases who discontinued P. P. against medical advice at some stage or other	...	...	32
(f) No. of cases admitted into hospital and other sanatorium with P.P.	...	...	15
(g) No. of cases for whom P.P. was abandoned after improvement	...	...	18
(h) No. of cases carried over to 1956 for continuing treatment	...	...	62
			<hr/> 153 <hr/>

4.

(a) No. of Initial A. Ps given	...	...	41
(b) No. of „ P. Ps „	...	...	52
(c) No. of A. P. refills given	...	...	899
(d) No. of P.P. „	...	...	2,749
(e) No. of air aspiration given	...	...	nil
(f) No. of infections including Streptomycin with other injections by way of symptomatic treatment	...	...	4,294

5. *Statement showing admission into hospital :—*

(a) No. of pulmonary tuberculosis cases diagnosed during the year 1955	...	1,331
(b) No. of cases put on the waiting list on their first appearance at the clinic	...	392
(c) No. of cases approved for admission including special wards and emergency cases	...	189
(d) No. of cases actually responded and admitted	...	149

*T. B. Clinics at the Government Hospitals :—*The four T. B. clinics each attached, one each to the General Hospital, Stanley Hospital, Royapettah Hospital and the Kasturba Gandhi Hospital, continued to be maintained jointly by the Madras Government and the Madras Corporation, the Government meeting the expenditure on medicine and accommodation of the clinics and the Corporation bearing the charges on establishment. The clinics were under the direct control of the Director of T.B. Institute, Egmore, and the Health Officer of the Corporation exercised overall supervision over them.

Each clinic was in charge of a medical officer assisted by two Health Visitors excepting the clinic at the Kasturba Gandhi Hospital where there was only one Health Visitor. All the clinics had the benefit of the services of House Surgeons and laboratory facilities of the hospitals to which they were attached. An emergency ward attached to each of these clinics proved extremely beneficial for cases like Hæmoptysis and spontaneous pneumothorax needing immediate attention.

The clinic attached to the K. G. Hospital attended only to cases among women and children. The other clinics served the needs of both men and women patients.

The control areas of these clinics are detailed hereunder :—

General Hospital Clinic	Stanley Hospital Clinic	Royapettah Hospital Clinic	Kasturba Gandhi Hospital Clinic
Chintadripet	New Washerman-	T. Nagar, South	Pudupakkam
Periamet	pet	Royapettah	Tiruvateeswaranpet
Park Town	Royapuram	Mylapore, North	Chepauk
Edapalayam	Singara Garden	Mylapore, South	Triplicane
Trevelyn Basin	Sanjeevirayanpet	Teynampet	Jambazaar
Sowcarpet	Korukupet	Saidapet	Mirsahibpet
Kothawal Bazaar	Basin Bridge	Adyar	
Kachaleswar	Peddunaickenpet	T. Nagar, North	
Agraharam	Seven Wells	Kodambakkam	
Napier Park	Amman Koil		
	Harbour		

The outturn of work in these clinics is given below :—

	General Hospital Clinic	Stanley Hospital Clinic	Royapettah Hospital Clinic	Kasturba Gandhi Hospital Clinic
1. No. of cases registered in the clinic (new cases)	5,961	5,499	3,825	4,672
2. No. of P.T. cases	3,321	1,060	1,151	583
3. No. of non P.T. cases	62	299	80	156
4. Total No. of T.B. Cases	3,383	1,359	1,231	739
5. No. of non T.B. cases	2,578	4,140	2,594	3,867

Contact survey and examination were conducted by the M. Os. and the H. Vs. by periodical house visits.

Cases examined in these clinics and requiring institutional treatment were placed on a waiting list maintained at the T.B. Institute, Egmore, and admitted into the T.B. Sanatorium at Tambaram as and when vacancies arose.

Deserving cases were recommended to the City Tuberculosis Association, and Kshyarog Nwaran Fund for financial assistance. One person from the K.G.H. clinic obtained Rs. 10 per mensem for a period of six months from the Bavanagar Fund. One patient from the Royapettah Hospital clinic got Rs. 20 from the City Tuberculosis Association per mensem for a period of 6 months and another Rs. 10 per mensem for a period of one year from Kshyarog Nwaran Fund.

Details of work done in these clinics are given in a statement in the appendix to the report.

B. C. G. Vaccination :—The Corporation B.C.G. team consisting of 1 Medical Officer, 1 Staff Nurse and a clerk carried on the B. C. G. campaign during the year. The team worked at the Clinic in Ashok Vihar in the mornings. The team also visited the Tuberculosis Clinic at Pulianthope, the Corporation schools and other places after 10 a. m.

The details of figures of Monteaux testing and B.C.G. vaccination are as follows :—

Institution.	Total No. tested	No. positive	No. negative	No. vaccinated.
Ashok Vihar Clinic	873	566	226	155
Pulianthope Clinic	620	354	145	135
Corporation Schools	6,528 (children)	3,575	2,167	1,747
Other places	8,468	4,612	2,649	2,236

Infectious Disease Hospital, Tondiarpet :—This hospital, only of its kind in the City, continued to function satisfactorily. Cases of infectious diseases both from the City and from the suburb underwent treatment in this hospital.

There were 181 cases at the commencement of the year. 3,572 cases from the City and 307 cases from the mofussil were admitted and treated during the year. 3,743 cases were discharged. There were 231 deaths. At the end of the year the strength of the hospital was 86.

Some improvements were effected during the year. An electrical laundry was installed. Two vans purchased during the year proved useful in the removal of cases.

A statement showing the details of work in the hospital in the year under report will be found in the appendix to the report.

Sri Thiruvotteeswarar Tuberculosis Hospital :—Sri Thiruvotteeswarar Tuberculosis Hospital, Konnur High Road, Otteri, is maintained by the Corporation of Madras for the treatment of pulmonary tuberculosis. The year under report is the eighth year of the working of the hospital which continued to progress in all directions. The staff of a Medical Superintendent,

with an Assistant Medical Officer (both specialised in Tuberculosis) continued to be in charge of the hospital, assisted by nursing staff of one Ward Sister and 7 Nurses.

The hospital had 64 beds (62 for in-patients and 2 for emergency cases) during the year. The hospital is well equipped with a laboratory, operation theatre, X-Ray plant and other clinical appurtenances to treat the patients in modern accepted methods of treatment. The hospitalisation, diet, and X-Rays are free of charge for indigent patients in the general wards. Those with an income of over Rs. 100 and the special ward patients have to pay for their stoppages and diet as the case may be. Stoppage charges levied in the special wards are as follows :—

(1) 'A' Class Special Wards Rs. 5 per diem with diet and Rs. 3 per diem without diet. (2) 'B' Class Special Wards Rs. 3 per diem with diet and Rs. 1 per diem without diet. Such of those patients in the general wards having a monthly income of over Rs. 100 but not exceeding Rs. 150 have to pay stoppages at As. 12 per diem per patient as fixed by the Corporation Council. The total income derived from stoppages and diet charges collected from the paying patients during the year was Rs. 11,682-8-0. Collection from the special ward patients was Rs. 11,325-12-0 and from the general ward paying patients was Rs. 356-12-0.

In the new block proposed to be opened there will be accommodation for 78 patients 54 (30 males and 24 females) in general ward 6 in (A) Class Special Wards and 16 in (B) Class Special Wards and 2 emergency wards. Installation of electric lift was completed and it is in use from September 1955.

During the year 5 patients were admitted as emergency cases with symptoms of Haemoptysis or Spontaneous Pneumothorax.

45 patients were admitted purely on public health grounds for isolation.

Number of Government and Corporation servants and their dependants admitted during the year 1955 is furnished below :—

(a) Central Government Servants and dependants ...	9
(b) Provincial Government Servants and dependants...	1
(c) Corporation Servants and dependants ...	41

The year opened with 51 patients left over from the previous year. There were 165 new admissions, thus making a total of 216 patients treated for the year. The total number discharged including 6 deaths during the year was 164, leaving 53 patients at the end of the year—48 indigent patients and 5 special ward patients.

The daily average number of patients treated during the year was as follows :—

General Wards ...	47.7	Males ...	39.8
Special Wards ...	6.8	Females ...	14.7
	<hr/> 54.5		<hr/> 54.5

Particulars of cases admitted during the year are as follows :

<i>Communal distribution :</i>	Hindus	Muslims	Christians
	144	9	12
<i>Sex distribution :</i>	Males 112	Females 53	Total 165

Age distribution :

Age groups	...	Males	Females	Total
0 to 4 years	...	...	...	...
5 to 14	„	...	3	3
15 to 24	„	38	18	56
25 to 44	„	56	30	86
45 to 64	„	18	2	20
65 years and above	...	...	...	...
		<u>112</u>	<u>53</u>	<u>165</u>

Classification of the stages of disease and results of treatment is based on the recommendation of the Tuberculosis Association of India. Out of the 164 (including 6 deaths) patients discharged during the year, 162 were tuberculosis cases and 2 were non-tuberculosis cases, one cancer of the lung and another virus pneumonitis.

1. Type and stage of disease of tuberculosis cases :

Pulmonary Tuberculosis	Stage I	Stage II	Stage III	Total
(a)	8	13	39	60
(b)	4	10	38	52
(c)	...	10	40	50
	<u>12</u>	<u>33</u>	<u>117</u>	<u>162</u>

Out of 162 tuberculosis cases discharged during the year, 11 patients stayed for periods less than one month. These 11 cases are therefore excluded from the results. Thus, it will be seen that 72.2% of the admissions were in the advanced or III stage of the disease. Out of 6 deaths 2 deaths only have been taken into statistics and 4 deaths left out of the statistics as the period of stay of these 4 cases, was less than a month. Excluding from statistics 11 cases and 2 non-tuberculosis out of the total discharges, the results of treatment of 151 cases are given below :—

	...	Stage I			Stage II			Stage III			Total
		A	B	C	A	B	C	A	B	C	
Quiscent	...	1	0	0	3	2	0	0	2	0	8
Much improved	...	6	3	0	2	3	4	22	10	2	52
Improved	...	1	1	0	7	5	5	14	20	18	71
Stationary	...	0	0	0	1	1	0	2	3	10	17
Worse	...	0	0	0	0	0	0	0	0	1	1
Died	...	0	0	0	0	0	0	0	1	1	2
		<u>8</u>	<u>4</u>	<u>0</u>	<u>13</u>	<u>11</u>	<u>9</u>	<u>38</u>	<u>36</u>	<u>32</u>	<u>151</u>

Out of these 151 cases discharged, 131 cases (86.8%) had positive result of treatment. Large majority of cases (i.e.) over 106 out of 151 were in the advanced or III Stage of the disease. Out of 33 cases in Stage II, 31

cases showed positive result of treatment. In the II Stage of the disease, over 93·9% had therefore positive results. 12 cases in Stage I, 12 showed (100%) positive result of treatment.

Details of surgical treatment

1. Artificial Pneumothorax :—

(a) No. of cases in which it was tried	Rt. side	16
	Lt. „	8
		<hr/> 24
(b) No. of cases in which it was successful		
	Rt. side	15
	Lt. „	7
		<hr/> 22
(c) No. of cases in which it was unsuccessful		
	Rt. side	1
	Lt. „	1
		<hr/> 2
(d) Bilateral A.P.		...
(e) No. of cases in which A. P. was started outside prior to admission to this hospital		27
(f) Total No. of patients who received A.P. treatment	...	60
(g) Total No. of A.P. refills given to in-patients and out-patients	...	810
2. Aspiration of fluids done	...	16 times
3. Aspiration of air done	...	2 „
4. No. of cases in which pneumoperitoneum was given : 48 patients received	...	786 refills.
5. No. of cases in which initial pneumoperitoneum was given	...	20
6. Thoracoscopy and Cauterisation of Adhesions	...	42
7. Phrenic Paralysis :	...	Nil

Medical treatment :— Antibiotics

1. Streptomycin. No. of cases treated	...	57
2. Calcium salt of Para Amino Salicylic Acid treatment	...	126
3. Conteben : (Cyazide or cyano pascal)	...	3
4. Isonicotinic Acid Hydrazide :	...	139

X-Ray Work :—

1. No. of Fluoroscopic Examinations done	...	1825
2. X-ray Skiagrams taken in the hospital	...	286

Tubercle Bacilli :—Out of the 164 patients discharged, 9 were negative by smear, 95 negative by concentration and 41 negative by culture

and 19 remained positive to tubercle bacilli. Thus 88.4% of the discharged patients had negative sputum and were non-infectious.

Total No. of Sputum samples sent for culture to Path.Lab. Corporation of Madras during 1955	...	60
C. S. F.	...	—
Widal and Blood Culture	...	1
Pleural Fluid	...	1

Laboratory work :—

1. Motion routine Examinations :	...	175
2. Urine examination : Routine	...	170
Albumin	...	171
Sugar-qualitative	...	1486
Sugar-quantitative	...	1038
3. Sputum for A. F. B. Smear	...	2332
Concentration	...	531
*Culture	...	60

* (At Corporation Pathology Laboratory)

4. Blood examination: Differential counts	...	853
B. S. R.	...	853
For M. P.	...	12
Index	...	853
5. Examination of Pleural Fluid for Tubercle Bacilli	...	4

Complications :—

1. Effusion on A. P. side	...	12
2. Haemoptysis	...	5
3. Coloured sputum	...	11
4. Ascariasis	...	1
5. Diabetes	...	8
6. Trachea Bronchitis	...	2
7. Laryngitis	...	1
8. Perianal tuberculosis	...	1
9. Secondary anæmia	...	3
10. Glands	...	3 Neck
11. Pleurisy (wet)	...	4 2 media- stenil
12. Spontaneous Pneumothorax	...	3
13. Hansen	...	1
14. Abdominal Tub. Peritonitis	...	2
15. Miliary Tuberculosis	...	1
16. V. D. H.	...	1
17. Med Hernia	...	1
18. Pregnancy	...	5

19. Salphngitis (Tubercle)	...	1
20. Br. Asthma	...	1
21. Malaria	...	1
22. Cent. Lat. Spread	...	1
23. Duod Ulcer	...	1
24. Hemiplegia	...	1
25. Ameobiasis	...	1
26. T. B. Meningitis	...	1
27. Hepatitis	...	1
28. Eczema	...	1
29. Ing. Hernia	...	1

The following visitors to the hospital during the course of the year made appreciative reference to the work done in the institution in the Visitors diary :—

Name of visitor	Date of visit
1. Mrs. M. Chandrasekharan, Deputy Minister for Health, Govt. of India (Centre)	... 2-2-55
2. Dr. O. Henry Jones M. P. H. Lagos Nigeria	... 6-9-55
3. Dr. E. J. Mc Weenny, Regl. Adviser Tuberculosis W. H. O. S. E. Asia Region	... 22-9-55
4. Dr. Johanes Holmes, W. H. O. Service	... 22-9-55
5. Dr. W. Fox, Medical Research Council, London...	12-11-55
6. Dr. M. A. Latif Khan, A. D. M. S. Govt. of Madras	.... 18-11-55

Venereal Clinic :—The clinic is situated in 83-84 A, Strahans Road, Otteri. It caters particularly to the poor classes of people like mill-hands in the surrounding areas and the residents of the surrounding slums like Valamar Nagar, Sivashanmugapuram, Salai cheri, Asirvadapuram, Radhakrishnapuram and Gray Nagar. Male and female sections are working in the same place, but in two separate buildings. There is one dispensary for both sections.

The out-turn of work in the Clinic during the year under report is detailed below :

Number of new cases treated	Number of total cases treated	The average daily attendance
Men ... 1,582	7,625	20.89
Women ... 906	5,467	14.98
Children ... 166	533	1.46
Total 2,654	13,625	37.33

1,063 specimens of blood were sent for serological test and 158 specimens were examined under D. F. microscope. Smears of urethral discharge were examined under an ordinary microscope for gonorrhoea. 3,208 injections were given and 17 minor operations were performed.

Cases are classified below according to diseases.

Sex	Syphilis	Gonorrhoea	Soft Sore	Bubo	Non venereal	Total
Male ...	222	333	480	48	499	1,582
Female ...	190	215	...	...	384	789
Children ...	56	42	...	...	185	283
Total ...	468	590	480	48	1,068	2,654

Treatment of syphilis was done on the basis of World Health Organisation's recommendation. Each patient got daily 6 lacs of the P.A.M for 8 successive days. For children the doses were varied according to weight and age. In a few cases of defaulters, bulk doses of 8 c. c. P.A.M which sterilizes the patient against infection were given.

Number of injections taken by each patient is given below :

Sex	No. taken 8 injections	No. taken 7 injections	No. taken 6 injections	No. taken 5 injections	No. taken 4 injections	No. taken 3 injections	No. taken 2 injections	No. taken one injections	No. taken no injections
Men ...	32	10	8	24	13	13	6	40	76
Women ...	117	9	11	6	9	7	6	4	21
Children ...	36	2	1	2	3	1	3	2	6

265 families were serologically examined and in 42 cases husbands and wives were +ve ; in 21 cases husbands, wives and children were also +ve; in 7 cases wives and children were +ve while fathers were negative, 72 husbands alone and 87 wives alone were +ve.

In 20 cases wives were treated in the Corporation Child Welfare Centres, while the husbands were treated in the Clinic.

57 men, 21 women and 6 children who were found +ve after serological examination did not attend the Clinic. Their whereabouts were not traceable.

Follow-up work :

Sex	No. available for blood test after treatment.	No. showed negative results.	No. doubtful	No. weak +ve.	No. +ve 1 in 2	No. +ve 1 in 4	No. +ve 1 in 8	No. +ve 1 in 16	No. +ve 1 in 32	No. +ve
Men ...	25	7	2	4	3	2	1	2	2	2
Women ...	30	11	1	10	3	—	2	—	2	1
Children ...	4	1	1	—	1	—	—	—	—	1

Gonorrhoea : 333 men 215 women and 42 children were given PAM, 2 c.c. each with good effect.

480 men had chancroid and 48 men had bubo. Suitable treatment by way of dressing and sulpha drugs yielded good results.

4,999 men 384 women and 185 children had genital lesions of non-venereal origin and they were treated successfully.

Health Visitor visited 649 houses and contacted 517 women, out of whom 98 responded.

20 cases of expectant mothers were referred to the Clinic by the Child Welfare Centres.

Veterinary Dispensaries :—There are four veterinary dispensaries one in each of the B,D,F and H cattle depots of the Corporation. They continued to do good service during the year under report and the number of animals treated in these dispensaries is furnished below :

Name of dispensary		No. of animals treated
1.	B depot dispensary	12,481
2.	D depot dispensary	14,103
3.	F depot dispensary	12,592
4.	H depot dispensary	6,125
Total		45,301

The five Veterinary Assistant Surgeons in charge of the conservancy cattle depots were relieved of their evening routine work in the depots and were placed in charge of inspecting the cattleyards in the City, dividing the City into five ranges. They give necessary medical advice, list the animals for pregnancy and advise them on the lines of feeding and breeding of animals.

The details pertaining to the number of cattleyards inspected by the five Asst. Veterinary Surgeons are furnished below :

Veterinary Assistant Surgeon in charge of		Number of cattleyards inspected
	(A & B)	700
do	(C & G)	253
do	(D)	250
do	(E & F)	695
do	(H)	207
do	(I)	812
Total		2,917

PUBLIC HEALTH LABORATORY

This Clinical Laboratory started in the year 1946 has been gaining in popularity as evidenced by the steady increase in the number of samples received for tests annually.

The working hours continued to be from 11 a.m. to 5 p.m. and specimens are received from 11 a.m. to 1 p.m. only.

Bacteriological examination (microscopic and culture) of blood, sputums, urine, motion, C.S.F; throat swab, pus, etc. are undertaken in addition to the routine examination of urine and motion. Routine blood counts E.S.R., gel, Chopra, widal reactions are done, blood smears are examined for malarial parasites, filaria and skinclipping for Hansens are examined.

Serological tests for syphilis (viz.)Kahn, and V.D.R.L. are undertaken. C.S.F, is also tested for Kahn and V.R L.R. Quantitative V.D.R.L. is done. Kahn test is done on Wednesdays and Fridays.

The services of this Laboratory have been increasingly availed of particularly by private practitioners and by the various institutions maintained by the Corporation.

Dr. S. Arogyadoss, M.D., D.G.O. Pathologist, left for U.S.A. in August 1955 for higher studies in Haematology at the District Columbia Hospital, Washington, D.C. U.S.A.

Dr. M. Anantaram, M.B.B.S. was appointed to act as Pathologist in her place.

During the year an additional post of an Asst. Pathologist was sanctioned. The medical staff at the end of the year consisted of:

1. Dr. M. Anantaram, M.B.,B.S., Pathologist
2. Dr. S. Alavandar, M.B.,B.S., Asst. Pathologist
3. Dr. U. B. Sanjeeva Rao, M.B.,B.S., Asst. Pathologist

During the year under review extensions to the Laboratory were undertaken. Two additional halls were constructed, one for serology and the other, a waiting room.

During the year the Laboratory handled 43,952 specimens compared to 311 specimens in the year 1946.

Serological tests were done for ante-natal cases attending Child Welfare Centres. 10 Centres sent blood for serological tests. A total of 15,279 samples was examined during the year.

In the year 1951, the U.N.I.C.E.F. (W.H.O.) donated to the Laboratory a field survey unit for the V.D. programme as well as free penicillin for the treatment of ante-natal cases, nursing mothers and children with venereal diseases. Good use is being made of the equipment. During the year 857 vials of P.A.M. (donated by U.N.I.C.E.F.) were supplied to various Child Welfare Centres for treatment of positive cases.

Sputum for acid fast bacilli examination is done free of charge.

Throat swab for diphtheria is done free of charge.

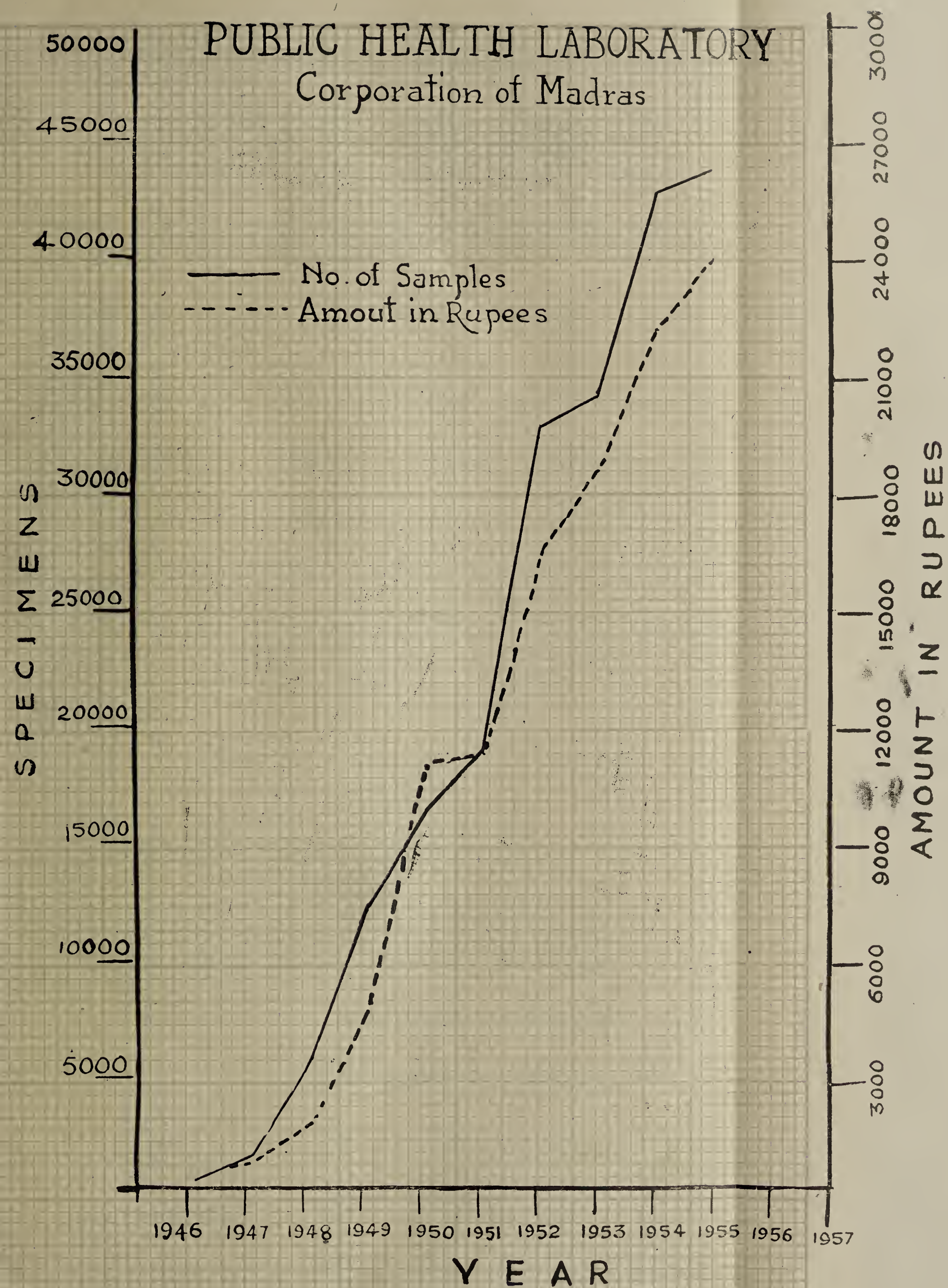
No fees are charged for the samples received from the Corporation institutions.

Statement No. I showing the progress of the Laboratory.

Year	No. of samples	Receipts	
		Rs.	A.
1946	311	215	0
1947	1492	647	8
1948	5642	1,635	0
1949	12,266	4,766	0
1950	16,346	10,939	0
1951	19,005	11,234	0
1952	33,089	11,560	14
1953	34,315	18,649	12
1954	43,070	22,336	8
1955	43,952	24,118	8

PUBLIC HEALTH LABORATORY

Corporation of Madras



Statement No. II: showing the total number of various specimens received during the year.

Blood	Sputum	Urine	Motion	Other specimens	Total.
35,456	2,050	2,660	3,549	237	43,952

Statement No. III showing details of specimens received from the Private Practitioners, various Clinics, Dispensaries, Child Welfare Centres, Corporation of Madras, during the year.

Private Practitioners.	C. W. C.	Dispensaries	Clinics	Others	Total
23,183	15,078	1,657	1,671	2,363	43,952

Statement No. IV showing the details of collection during the year.

Done free.	Charged.	Total.	Receipts	
			Rs.	As.
23,472	20,480	43,952	24,118	8

Annexure to Statement IV showing the schedule of rates for the examination of specimens.

Blood ordinary examination counts etc	...	Re. 1 per test
do. Agglutination test (widal)	...	Rs. 2
do. culture for B. typhoisis	...	2
do. for V.D.R.L. tests	...	2
do. for Kahn test	...	2
do. quantitative of V.D.R.L. tests	...	2
Urine for qualitative examination	..	1/8
do. for quantitative examination	...	Re. 1
Motion for microscope examination	...	1
do. for culture examination	...	Rs. 2
Other smears for G.C. etc.	..	Re. 1
Skin clipping smears for Hansens	...	Re. 1
B% sedimentation rate	...	Re. 1

Statement No. V: showing particulars of serological test:

S. No.	Source.	No. of posi- tive cases.	No. of negative cases	Doubtful	Total.
1.	Child Welfare Centre ...	864	14350	65	15,279
2.	Private Practi- tioners ...	221	2133	52	2,406
3.	Venereal Clinic	263	827	71	1,161
		<hr/> 1348	<hr/> 17,310	<hr/> 188	<hr/> 18,846

ASHOK VIHAR

Health and Recreation Centre :

No. of families on rolls on 1st Jan. 1955	...	...	315
No. of families enrolled during the year	...	...	125
No. of families removed during the year	...	...	63
No. of families on rolls on 31st Dec. 1955	...	...	377
Total No. of families from slum areas	...	...	256
Total No. of families from areas near the slums	...	...	121

The member families are classified below according to the number of children in them.

No. of children	Nil	1	2	3	4	5	6	7	8	9	10	11
No. of families	20	72	73	95	58	32	15	7	4	-	-	1

In the following statement monthly income of the member families is given.

Income grade	Nil	Upto Rs. 30/-	Rs. 31-60	Rs. 61-100	Rs. 100-150	Over Rs. 150/-
No. of families	45	83	135	97	20	7

Nature of employment of the wage earners in the member families was as follows :

Nature of job	Unemployed	Unskilled	Skilled	Clerical	Business
No. of persons	56	87	94	41	72
	Teaching	Ancillary		Miscellaneous	
	10	97		1	

Classification of member families according to caste and community is given below :

Caste	Harijans including converted Christians	Hindus including backward communities	Muslims	Anglo-Indians	Indian Christians
No. of families	205	100	27	33	12

The object of the 125 new families joining the Centre is set forth below :

Reasons	To use the centre completely	For maternity care	For health reasons	To use the Creche	For recreation alone
No. of families	52	39	19	10	5

171 visits were made by each of the two doctors and two welfare organizers to areas where members resided. 48 visits were also made to

slums other than those where the members lived. Among these may be mentioned the following :

Kanniappa Nagar, Ayodhya Kuppam, Gokulam and Vivekanandapuram.

The benefits derived by contacting members in their homes may be stated as follows :

1. It gave opportunities to impart health education more frequently.
2. It made it possible for the staff to study the socio-economic and environmental conditions and to give suitable advice and help for the problems the members were confronted with.
3. It enabled the staff to gain the confidence of the members and thereby secure their co-operation to do better service.
4. It enabled the staff to follow-up the care of babies and their convalescent mothers.
5. It gave impetus to women to attend to personal, domestic and environmental hygiene in their homes.
6. The doctors played the part of family doctors to the underprivileged who could not afford to pay private doctors.
7. It enabled to instill in the minds of the members their duties and responsibilities towards their family, community and the state.

The major factors undermining the health of the community were the following :—

1. Low economic status
2. Unwieldy family
3. Lack of hygienic dwellings
4. Lack of environmental sanitation
5. Lack of understanding of proper nutrition
6. Broken homes
7. Superstition, customs and traditions
8. General apathy

Each home had its peculiar social problems and the staff helped the member families to overcome their social problems in their own limited way through social education and help.

11 girl members who got married enrolled themselves as new members setting up separate families.

Weekly visits were made to slums other than those from where the members were drawn. 14 such slums were visited and in four slums, work was continuously done for a time, so that local residents would by that time learn to carry on the work by themselves. Vivekanandapuram, Gokulam, Ayodhya Kuppam, and Kanniappa Nagar were the slums visited more number of times. In these slums women and children were found very unhealthy. In Gokulam, Teynampet, cases of filariasis and leprosy were much more common.

Members of the Centre took part in cleaning the slums, advising the residents on cleanliness and care of children. The member children bathed the local children and conducted music and games for them.

*Service at the Centre :—*Each individual in the family was given a health check-up once a year with the object of assessing the health standards and to investigate and check any ailments at its initial stage and thereby prevent the progress of disease and avoid absence from work of the wage earner and consequent loss of pay. It also benefited the children as measures were taken to check those deviating from normal standards. 60 per cent of the old members underwent repeated check-ups. Of late, members have been found to evince keen interest in the health check-up of their children which is a welcome sign.

1,250 general, 577 dental, 464 eye and 337 E.N.T. check-ups were done during the year. Out of 761 members who had a repeated check-up, 576 showed increase in weight, 162 decrease in weight and 23 stationary weight.

Of the 1,250 members who underwent health check-ups the following are the common diseases from which some of them were suffering :—

	No. diagnosed	No. improved after treatment
Nutritional deficiencies ...	204	50
Nutritional anæmia ...	65	13
Pulmonary tuberculosis ...	13	7
Hansens disease ...	3	2
Venereal diseases ...	4	3
Refractive error ...	71	5
Dental caries ...	19	...
Tonsils and adenoids ...	39	5
Kalaazar ...	2	1
Hypertension ...	5	...
Chronic alcoholism ...	5	...
Rheumatic heart diseases ...	8	...
Typhoid ...	1	...
Filariasis ...	7	1

Surgical treatment arranged at the Government hospitals is listed below :—

Nature of treatment	No. treated
Tonislectomy ...	5
Herniotomy ...	1
Mastoidectomy ...	1
Hydrocele ...	2
Tumor Kidney ...	1
Gynacomastia ...	1

542 pathological investigations were done. 197 members were referred to the various Government hospitals in the city for further treatment.

42 members were sent to the T. B. Clinic, Pulianthope of whom 13 were positive for pulmonary tuberculosis.

13,725 prescriptions were dispensed at the part-time dispensary.

Maternity Section :—

No. of cases undelivered at end of 1954	25
No. of Ante Natal Exams done in 1955	131
No. delivered with Ante Natal Exams	100
No. delivered without Ante Natal Exams	7
No. of cases delivered in Women and Children Hospital	11
No. of cases delivered in Maternity and Child Welfare Centres	1
No. of cases delivered in King George Hospital	1
No. of cases delivered in R.S.R.M. Hospital	1
No. of cases delivered at home	10
No. of abortions	6
No. of women not traceable due to change of residence	4
No. of cases yet to deliver at the end of 1955	20

Among the diseases noted during the ante-natal examinations B. Vitamin deficiency and anæmia were predominant. There was one case of syphilis which was treated during the expectant stage and the patient delivered a normal live baby.

Complications of Deliveries met with are set forth below :—

Breach extraction	1
Premature births	5
Face presentation	2
Forceps delivery	5
Episcotomy	1
Uterine Inertia	1
Post Partum Hæmmorrhage	1
Still births	2

(One due to cord round neck and another due to prematurity)

Family Planning :

Advice on Rhythm method	...
Advice on Diaphragm and Jelly	9
Advice on Preception	23

8 persons bought diaphragm and jelly and 6 persons bought preception.

Creche: —

No. of children on rolls on 1-1-55	71
No. of children admitted during the year	43
No. of children removed during the year	53
No. of children on rolls on 31-12-1955	61

13 children of the school-going age were admitted in the elementary schools. 7 children were removed due to change of residence. 30 children left without any reason. Three died, two due to marasmus and chronic diarrhoea and one due to sudden fits and fever. They failed to attend and get treated regularly.

558 general, 51 dental, 66 eye and 53 E.N.T. examinations were done. The following diseases were met with in the cases examined :—

Rickets	4
A. D. deficiency	34
B. deficiency	5
Avitaminosis	7
Cervical adenitis	61
Scabies	14
Impetigo	9
Anæmia	21
Fevers	53
Diarrhoea and dysentery	50
Boils	12
Skin infections	4
Chr. rhinitis	33
Dental carries	2
Conjunctivitis	16
Whooping cough	4
Measles	2
Chickenpox	14
Burns	1
Cellulitis	1

Laboratory investigations :—

Blood Count	85	Low R.B.C. 53
		Low H.B. 68
		High W.B.C. 85
High eosinophilia	35	
Blood smear	5	all negative
Gel. & ehopra	2	both negative
Widal	2	do.
Motion exam	95	
Positive of round worm ova	50	
Cysts of entamoeba histolytica	4	
Hook worm ova	1	
Bacillary dysentery	13	
Cysts of giardia lamblia	12	

PREVENTIVE INOCULATIONS :—

Primary vaccination	5
Re-vaccination	43
Whooping cough vaccine	14
T. A. B. vaccine	47
Monteasxst done	18
Positive reaction	8
Negative reaction	10
B. C. G. inoculation	10

As usual this section was in great demand for working mothers. As a measure of economy the quality of the food was lowered and it was resulted in greater number of deficiency diseases, their complications and sequelæ. The nursery section was of use to 35 children of the pre-school age. Mothers' meetings were held periodically at the centre with the object of educating the mothers on the care and welfare of children.

Girls' Section:—

Average attendance	35 on week days
Average attendance	55 on holidays
No. of girls attending school	246
No. of girls not attending school	55
No. of girls employed	15
No. of girls engaged in domestic work	11

Usually the girls attended the section after their school hours in the evenings, but during holidays they spent a major portion of the day at the Centre.

Facilities for taking bath and attending to personal hygiene have been provided and the girls use them to the advantage.

Handwork like needlework, card-board work, and book binding was taught to them as a part of their recreation programme.

Talks and group discussions have been held periodically to raise their level of thought in civic matters. Drama, dancing, music and folk were taught to girls who had aptitudes for them. During summer holidays girls were given books from the library to read and to write stories. Games, both in-door and out-door, were provided daily for them.

Boys' Section:—

Average attendance	35 on week days
Average attendance	50 on holidays
No. of boys attending school	168
No. of boys not attending school	106
No. of boys employed	16
No. of boys engaged in domestic work	20

The activities in this section were almost similar to those in the girls section.

Womens' Section:—

Average attendance	27
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Work in this section consisted of attending to personal hygiene of women, and education of women on matters relating to efficient running of the home. Needle work was also taught. Some of the women were interested in learning book binding. Group talks and discussions were held to educate them on health matters and the responsibility towards the care of children. As a measure of relaxation from their monotonous hard work, recreation was provided and utilized by some of them. 317 garments from various sections were mended by the members. Members were taught the use of the sewing machine. Some members made use of the machine to stitch garments for the families. 131 garments were stitched in the machine. To those who had already learnt elementary needle work, embroidery and crochet work were taught.

Men's Section :—

Average attendance	45 on week days
Average attendance	60 on holidays

*Canteen :—*With a view to bring down the maintenance cost of the Centre, the canteen was closed from 30-3-55. The members themselves started running it and gave it up after 6 months.

*Health Education :—*Health education for the members was done at the institution and at the homes of the families. At the institution education was imparted through talk and precept. Stress was laid on personal cleanliness and members were provided with these facilities such as bath, soaps, towels, combs, hair oil, and changing of clothing at the Centre for their use. Talks on hygiene, nutrition and prevention of diseases were held as also demonstrations in cooking cheap nutritious food. Mothers' meetings were held to guide them on the care of children. Visual education through films and health farces were also imparted.

The activities of the centre as a teaching and training institution in public health and social medicine were continued.

Students of the following colleges took advantage of the teaching and training given at the Centre.

1. Students of the Madras Medical College, Stanley Medical College, College of Integrated Medicine and Christian Mission Hospital, Vellore.
2. Students of the Hope School of Nursing and Post-Graduate Nurses from Vellore.
3. Students of the Madras School of Social work, student trainees of the short term course of social service sponsored by the State Social Welfare Board.
4. Trainees of the Orientation Training Centre, Poonamallee.
5. Students undergoing diploma course in Social Service from Stella Marrys College,
6. Home Science students from the Queen Mary's and Women's Christian Colleges.
7. Students undergoing D. M. and C. H. Course.
8. Assistant Women Welfare Officers, Andhra State, and Trainees of Indian Red Cross Society.
9. Students of the Teacher's College, Lady Willingdon Training College, St. Joseph's College, Trichinopoly, Triplicane National Girls School and Hindi Pracharak Sabha.

As a part of the refresher course the State Health Officers were given a lecture on health centres. Periodical lectures were given to Trainees of the Orientation Training Centre on "Positive Health." Lectures were given on Positive Health and Family Planning to student, trainees of short-term course in social work. The State Girls Division of Auxilliary Cadet Corps, when they camped in Madras in December 1955 were given training in field work in a few slums in the City.

*General :—*All festive occasions were suitably celebrated when most of the members took part.

The 5th Annual Mayor's Cup Football Tournament for the slum boys was successfully concluded when the Mayor Sri M. A. Chidambaram presided and distributed the trophies to the winner and runner up clubs.

Winners : Veeramuthu Memorial ' A '

Runners up : Veera Muthu Memorial ' B '

The annual sports were conducted during November 1955 when members of both sexes and of different age groups participated. The prizes were distributed by the Hon. Councillor Kumari T. N. Ananthanayaki, B.A., B.L., during the 7th anniversary celebrations.

Binding Section :—500 file pads were made and sent to the Health Department. A destitute girl and her younger sister who came to the Centre from Nellore were admitted in the Abhaya Nilayam and Balamandir respectively. One of them visited the Centre six months later and she was found to be happy, and going for her E.S.L.C. Examination.

Excursions were arranged to Ennore, Kunnathur and Tiruvannamoor. The members were also taken to the Corporation Flower Show and the Circus.

Two girl members were undergoing midwifery training in the Women and Children's Hospital and one girl member teacher's training in the Avvai Home, Adyar. Two members obtained jobs in Railway services, 3 members were provided temporary jobs in the circus and 4 members in the S.I.A.A. Park Fair and Exhibition.

Deaths :—There were 29 deaths during the year among the members. The details are furnished below :—

Age	Male	Female	Total
Under 1 year	8	5	13
2 to 6 years	6	6	12
31 to 40 years	...	2	2
41 to 50 years	1	1	2

The causes of death among children are given below :

Cause	No. died
Diarrhoea	12
Broncho pneumonia	5
Fever	2
Cancrum oris	2
Malnutrition	4

The causes of death among adults were as follows :

Cause	No. died
Pulmonary tuberculosis	3
Rheumatic heart disease	1

Marriages :—Eight members got married during the year. One member (F. R. No. 280) was living as the spouse of a man without wedlock. They were advised to get married and with their consent a registered marriage was performed at the Centre on 11-4-55.

Grants, gifts and donations :—

1. Canadian Save the Children Fund Committee :—

Through Lady Nyes effort the Centre received the following from the above mentioned organisation :

(a) A cheque for Rs. 4,782 for the use of the children members of Ashok Vihar.

(b) 20 Tee shirts

12 Light blue Shirts

12 Frocks for girls

13 pairs of Pant

15 pairs of trousseurs for boys

2. Guild of Service (Central, Madras) :—

(a) A box of water purifying tablets

(b) 20 barrels of milk powder (9 barrels contained unusable milk powder)

(c) One barrel and 9 small tins of butter oil

(d) Ten small tins of cotton seed oil

(e) Six tins of cheese

(f) Nine packages of multipurpose food

(g) One CARE parcel

(h) Twenty-two non-fat dry milk solids

(i) Rupees fifteen and annas ten only being the donation from Rastrapathy Dr. Rajendra Prasad

3. Mr. Roy McCorket, Chief of Care, India :—

(a) Sim packages of dry milk solids

(b) Three small tins of butter oil

4. Miss. H. D. Ten Bricks, Public Health Nurse, World Neighbour Rural Centre :—

(a) A parcel of Anti Biotics

5. Indian Red Cross Society, Madras :—

(a) 38 small packets of sweets

(b) 500 sulphanide tablets of which 2,000 were given to the Corporation Orphanage

6. Messrs Nestles Products (India) Ltd.

(a) 2 lbs. of Eledon

7. Messrs. Dumex (India) Ltd.—

(a) 2 lbs. baby food

(b) 3 plastic feeding bottles

8. Health Department, Corporation of Madras :—

(a) One barrel of butter oil

(b) Eight measures of cow's milk and 3 measures of skimmed milk

(c) Five tins (4 lbs. tins) of cheese

9. Sowbaghyavthi Neelambal Sisuv Samrakshana Ksheera Dharma Endowment :—Rs. 1,000

Out of the interest accrued from the above endowment, cow's milk was supplied to the children of the creche.

10. The State Government was pleased to sanction a grant of Rs. 6,000 for the year 1955.

11. Mrs. Sherman Cooper, wife of the Ambassador of U.S.A. to India—2 lbs. sweets to the children of the creche.

The Corporation is indeed grateful to the organizations and the individuals for their kind donations and gifts which have been used for the benefit of the deserving members. Thanks are also due to the U. S. I. S., B. I. S., and British Council for the loan of films and number of periodicals. The Centre is also indebted to the World Health Organization for sending its periodic literature on promotion of health and prevention of diseases.

*Visitors :—*The Centre had the honour to receive the following visitors during the year under review :—

1. Sri Daya Bhai Patel, Mayor of Bombay.
2. Dr. Barkat Narain, Advisor, Health Planning Commission, New Delhi.
3. Dr. Biermaw, M. D., World Health Organization Consultant.
4. Mrs. Sherman Cooper, American Embassy, New Delhi.
5. Mr. R. D. Beohar, Chairman, Nagpur Corporation.
6. Mr. Kanthilal Ghiza, Chairman, Health Committee, Ahmedabad.
7. Mr. B. C. Das Gupta, Secretary to Government of India and Director of Public Health Services to Bengal.
8. Mr. H. B. C. Portman, World Health Organization pediatrician.
9. Mr. Robert Single, U. S. Committee for U.N.I.C.E.F.
10. Mr. Ramsay, American Consul, Madras.

MEDICAL INSPECTION OF CORPORATION SCHOOLS

During the year 1955-56 four medical inspectors and three medical inspectresses continued to attend to the medical inspection of children in the Corporation schools. They had to work strenuously as the complement of staff was not sufficient to cope up with the increase in work. The need for additional staff was keenly felt and a proposal to appoint honorary staff for medical inspection is under consideration.

*Routine of work :—*Out of the 275 schools in the City only 124 schools were visited by the school medical inspection staff during the year. The total number on rolls in all the 275 schools was 60,093 boys and 28,041 girls. There were 24,952 boys and 20,035 girls in the 124 schools visited during the year. The average attendance in the schools visited was 17,937 boys and 17,320 girls. 15,098 boys and 12,375 girls were examined during the year, the total being 27,473. Out of them, 5,232 boys and 6,218 girls were entrants and 9,866 boys and 6,157 girls were regulars. 5,668 boys and 5,280 girls were defective and needed treatment.

*Personal hygiene :—*1,208 boys (8.00%) and 167 girls (1.35%) were dirty in their person and clothing. Instructions on personal hygiene were imparted to them. Personal hygiene was also taught in the classes on the advice of medical inspectors.

*Malnutrition :—*1,688 boys (11.18%) and 1,601 girls (12.20%) were under-nourished as against 12.09% and 13.09% respectively in the previous year. Shark liver oil and calcium lactate were given to them. 4,296 children were given shark liver oil and calcium for malnutrition and rickety chest. 1,900 were given yeast tablets for stomatitis of nutritional origin and other signs of Vitamain B deficiency. 20,086 children were given reconstituted milk on all school-working days during the year from July, 1955 till February, 1956. This included under-nourished children. Improvement was noticed in them as a result of these steps.

*Administration of skimmed milk :—*483 children in seven schools were selected for giving skimmed milk on school working days. The administration was begun on 1-9-54 and ended on 31-3-55. The total number of days milk was given was 146 and the average attendance of

children at the milk taking class was 124. Out of 483 children selected only 363 were available at the final stage. The rest of the children either left the school or were long absentees.

To assess the benefit of this measure two other groups of children were selected. One taking midday meals and the other not taking anything. The growth of the children as evidenced by the increase in the height and weight and the presence of nutritional ailments before and after the period were recorded. The period of observation extended to 7 months.

The following table shows the comparative height and weight increase and other particulars noticed:—

No.	Group.	Total No. of children	Total No. of working days	Average No. of days the children attended	Average age of these groups	Average income per month Rs.	Average weight increase during the period	Percentage of ailments cured and improved
1.	Milk ...	363	146	104	8	42	2.83	49.70
2.	Midday meals ...	304	146	124	9	33	4.15	46.43
3.	Control ...	308	146	111	9	43	2.24	25.85

It may be inferred from the Statement that while midday meal feeding is a good method for accelerating the growth of children, administration of milk is more effective in the cure and prevention of nutritional ailments.

It would seem to be of immense benefit if both are combined in the control of nutritional ailments and acceleration of the growth of the school children. A tumbler of milk to children taking midday meals would go a long way in improving their nutritional condition as it would result in giving a balanced diet.

The following statement shows the details of the incidence of ailments relating to nutrition and the effect of treatment measures adopted:—

S. No.	Nature of defects	Milk group			Midday meal group			Control group		
		Total No. of defects	No. cured	No. improved	Total No. of defects	No. cured	No. improved	Total No. of defects	No. cured	No. improved
1	Malnutrition	226	37	80	203	33	53	200	7	49
2	Xero-derma	83	38	12	91	44	10	58	15	2
3	Xero-opthalmia	92	37	18	98	33	10	55	5	6
4	Growth of adipose tissue	90	45	3	75	50	...	78	18	2
5	Rickety chest	76	1	...	56	5	1	51	..	9
6	Stomatitis	53	22	21	47	12	13	31	6	2
7	Night blindness	5	1	...	3	1	...	1	..	..
8	Conjunctivitis	15	8	5	2	2	...	2	2	...
Total		660	189	139	575	180	87	476	53	70

Certain difficulties have also to be brought out. Milk as given was not relished by many of the children and was taken reluctantly. It requires boiling, and addition of sugar to improve the taste. If this is to be adopted steps should be taken to see that the reconstitution, and boiling of

milk and addition of sugar etc. are done at the meals centres and delivered at the school daily.

Minor Ailments :—1,584 boys (10·49%) and 982 girls (7·94%) had dental and oral complaints. 1,751 children had stomatitis and were treated with benefit; 75 children had their carious teeth extracted, 2,365 children had enlarged tonsils, 105 children had their tonsils removed, being grossly infected. Others had undergone treatment at the school. 9 having defects of vision minor had them corrected by wearing glasses. Others having visual defects of a degree had a course of vitamin oil. 156 children received treatment for discharging ears, 7 boys and 3 girls were defective in hearing and they were provided with seats near the teachers so as to be within the range of their hearing.

Circulatory and respiratory diseases :—31 boys (0·21%) and 244 girls (1·98%) had defects relating to heart and blood. 207 children having anæmia improved by treatment. 48 had enlarged spleen due to malaria and they were suitably treated.

Diseases of bones and joints :—716 children had deformities of chest due to rickets in childhood and were suitably treated.

Infectious and contagious diseases :—586 boys (3·88%) and 1,082 girls (8·72%) had infectious and contagious diseases the corresponding percentages for the previous year being 4·23 and 6·91 respectively. 1,133 children were treated for scabies. 315 children having signs and symptoms of Hansen infection in early stages were treated at the Corporation Skin and leprosy clinics. Good improvement was noticed in them.

General preventive work :—The medical inspection staff re-vaccinated 3,078 children during their inspection in addition to the re-vaccinations done by the divisional vaccination staff.

Other diseases or defects :—311 children were having defects not mentioned under the above mentioned heads. They were suitably treated.

Medical treatment :—8,110 children were treated at the schools. 912 children were sent to Corporation dispensaries for treatment of ailments that could not be attended to at the schools. 943 were sent to Government Hospitals for receiving attention to some of the more serious ailments. 115 children were sent to the Government Ophthalmic Hospital.

Re-inspections :—275 revisits to schools were paid after the routine inspections for treatment and re-examination of the defectives. 11,310 re-examinations of children were done during these re-visits.

Co-operation of Parents and Teachers :—1514 parents of children were present in the schools at the inspection and treatment of their children. Adequate arrangements were made at the school premises for the treatment of the ailing and good results were obtained.

School Sanitation :—Defects in the school buildings with particular reference to latrines, play-ground facilities and water-supply were noticed and suggestions made to the Education department for remedying them.

Midday Meals :—11,838 children in 237 schools situated in poor localities were provided with midday meals on all full working days. The medical inspectors supervised the arrangements made for the distribution of food. In addition to this, in 13 feeder schools i. e. Nursery schools children were given fried rice powder mixed with milk and sugar in the mornings.

Health Education :—162 lectures and 179 talks were arranged in the schools for the benefit of the children. The total attendance at them was 11,056.

Medical Examination of Corporation Workers :—895 male and 137 female thozilalies of all the departments were examined for physical fitness or invalidation during the year and appropriate certificates were issued to them.

SANITATION

Dr. S. E. D. Masilamani was the Health Officer till he proceeded on leave from 15th February, 1955 preparatory to retirement. Dr. A. Ranganathan, senior most Assistant Health Officer, acted in his place.

The Health Officer was assisted by the following four Assistant Health Officers, Dr. A. Gopalakrishnan, Dr. A. Ramachandra Rao, Dr. B. V. Sundara Babu, Dr. P. V. Balakrishna Marar, they were in charge of divisions 1 to 13, 14 to 25, 26 to 40, and 41 to 50 respectively. 10 large divisions were bifurcated for administrative convenience and each part placed in charge of a separate Sanitary Inspector. There were 61 Sanitary Inspectors in charge of the 50 divisions of the City during the year. Dr. Muthiah, Assistant Health Officer whose services were lent to the Conservancy Department retired on 9th December, 1955 and an Assistant Engineer was appointed in his place to work permanently in that department.

There were 5 Food Inspectors to take samples under the provisions of the Prevention of Food Adulteration Act. They were in charge of divisions 1 to 10, 11 to 20, 21 to 30, 31 to 40 and 41 to 50 respectively.

Water Supply :—The Water Works at Kilpauk and infiltration gallery wells at Sembiam and Saidapet continued to be the main sources of protected water-supply to the City. Report of the Water Analyst on the quality of the water supplied is appended to this report.

Slum dwellers in the extended areas had their supply of protected water through lorries maintained by the Water Works Department. A statement showing the area so benefitted by supply of water is given below :

Division No.	Place	Quantity of water supplied daily.
20	Madumanagar	1,600 gallons
20	Malapattady	1,600 do
20	Neils garden	800 do
20	Sabapathy Mudaliar Street	800 do
35	Pulliyur cherry	800 gallons.
35	Kodambakkam cherry	800 do
35	Saligramam	800 do
35	Saligramam cherry	800 do
35	Rajajipuram	800 do
48	Nallankuppam	1,600 do
48	Mettupalayam	800 do
49	Taluk Office	800 do
49	Velacheri Road	800 do
49	Kallikundram	800 do
49	Y.M.C.A. Village	800 do
49	50, Mount Road (Guindy)	800 do
49	Madavankarai	800 do

There were 4,102 public fountains on 31-3-'55. During the year 1955-56, 309 public fountains were newly erected and 5 were removed. The total number of public fountains on 31-3-'56 was 4,406.

Sewers and F. O. Ls : At the beginning of the year, the City was sewered to a length of 411.23 miles. During the year 46,820' - 11" (8.87 miles) of sewers were laid in areas detailed in the statement furnished in the Appendix.

The number of flush-out latrines constructed in private buildings during the year was 1,413 of which 941 were constructed by private plumbers.

There were 430 sanitary conveniences in the City of which 217 were improved type of public conveniences, 151 were of old type of public conveniences and 62 were of dry latrines.

*Housing :—*The number of building applications received during the year 1955-56 was 3,427. 2,550 of these were sanctioned and 561 were rejected. During the year under report 4 houses and 5 tenements were constructed under loan funds. More could not be constructed in view of the financial commitment involved.

*House Inspection :—*The field staff inspected the houses as a routine measure and took action to remedy sanitary defects noted in the houses so inspected. A total of 29,551 houses was inspected by the Sanitary Inspectors during their routine inspections and 1,053 inspected on complaints made. Particulars of defective houses noticed by them and action taken are given below :

1. No. of houses without proper drainage	...	826
2. No. without adequate latrine accommodation	...	1,537
3. No. without proper water supply	...	330
4. No. without sufficient ventilation	...	402
5. No. found otherwise defective	...	3,673
6. No. of notices issued for rectification of defects	...	6,570
7. No. of houses repaired as a result of action taken	...	5,534

*Offensive trade :—*16,956 applications were received and dealt with during the year under report. 15,509 cases were found fit for being licensed. In 1,447 cases licences were refused due to sanitary reasons.

127 Lodging houses were registered during the year under the provisions of the Madras Public Heath Act 1939.

*Cattleyards :—*There were 1,273 licensed cattleyards at the beginning of the year. During the year 2,102 applications for licences were received. In 1,202 cases licences were issued and in 889 cases licences were refused. 1,234 notices were issued for rectification of defects and 947 cases were prosecuted for not complying with the terms of notice. As a result of action taken 552 cattleyards were improved. The scheme to utilise the services of the Veterinary Asst. Surgeons in charge of conservancy cattle depots to look after the health of the milch animals was given effect to.

Corporation continued to maintain public cattleyards at the following places :

Location.	Accommodation available
1. Basin Bridge Road, 7th division	165 animals.
2. Venkatesa Naicken Street, 24th division.	200 do
3. Singanna Chetty Street 29th division.	58 do
4. Venkatarangam Pillai Street. 41st division.	40 do

The proposals for founding a milk colony and a dairy form at Arumbakkam had to be kept in abeyance in view of the comprehensive scheme of the Government for evacuating the milch cattle from the City. This scheme was under the active consideration of the Government with a view to give relief only one to the residents particularly in crowded areas, a proposal to provide sanitary accommodation for the milch animals in such areas was under consideration by the corporation.

Dobhikhanas :—The Corporation continued to maintain the following dobhikhanas in various parts of the City.

Location.	Division No.	No. of stones
1. Butchammal Street New Washermenpet	1	40
2. Robinson park	3	42
3. Conransmithnagar	24	52
4. McNichol Road (Chetput)	33 A	81 Rooms with stones 55 stones only.
5. Apparswami Koil St.	44	14

In the dobhikhana at Robinson Park, improvements like flooring of washing places, renewals of water pipes and repairs to drains were effected. In the other dobhikhanas limewashing and minor repairs were done. The construction of a dobhikhana in Nungambakkam was under progress.

Rabies Control :—There were 2 motor vans and 8 dog catchers for seizing stray dogs in the City. The dog catchers accompanied the Superintendent, Lethal Chamber in the motor vans for catching stray dogs in public places. During the year under report 23,126 dogs found straying were seized and taken to the Lethal Chamber for destruction. 12,056 of these were bitches. 2,091 dogs were returned to claimants and 895 dogs were given to the two Medical Colleges of the City for experimental purposes. 20,125 dogs were electrocuted. 221 dogs were caught and destroyed on complaints made. The students of the Sanitary Inspectors' Course and of the Medical Colleges visited the Lethal Chamber. They were given demonstrations in the method of seizure and electrocution of dogs.

Beggar Relief

The Corporation continued to maintain the 4 Homes for the benefit of the poor in the City. One of them was a voluntary Home for aged destitute and another an orphanage. The other two were Reception Home for beggars rounded up under the provisions of the Madras City Police Act,

Poor House :—The Poor House, a voluntary Home run for the old and infirm destitutes of both the sexes continued for some time during the course of the year under report. The following statement shows the details of strength of the Home during the year 1955-56.

Inmates sex	No. on 1-4-55	Admissions	Dis charges	Deaths	Transferred to Monegar Choultry	No. on 31-3-56
Males	56	10	18	3	45	nil
Females	22	8	6	4	20	nil

Some of the able-bodied inmates did gardening work and assisted in cooking. In July 1954, seventy-five inmates of the Home were sent to the Monegar and Raja Venkatagiri Choultries. On December 21, 1955, the 45 male and 20 female inmates in the home were transferred with their clothing, bedding and feeding utensils provided to them in the home. For



Quarters of the Medical Officer at Ayanavaram



Construction of a Crematorium at Washermanpet

the transferred inmates to the choultries a per capita charge of Rs. 10 was paid besides an overhead charge of Rs. 250 p.m. The total amount so paid during 1955-56 was Rs. 13,585.

A grant of Rs. 1,606 was paid towards the cost of erection of sheds in Moneger Choultry. This was in addition to the grant of Rs. 6,000 made for the purpose in the previous year. The inmates were given special treats on festival days out of the interest accrued from the endowments made.

The Poor House was in existence under the management of the Corporation for 30 years from the year 1927.

Orphanage :—The Orphanage run for 50 fatherless boys who were destitutes continued to be full during the year under report. The lower elementary school attached to the Orphanage continued to impart education upto the 5th Standard. For attending classes above the 5th Standard, orphans were sent to the nearby Corporation school. Three orphans appeared for the Government Elementary School Leaving Certificate examination.

The health of the children was fair all through the year. A donation of 2,000 multi-purpose tablets was received as gift from the Hon. Secretary, Indian Red Cross Society, Madras State Branch. These tablets were arranged to be issued daily to the poor and under-nourished children of the Orphanage.

Fifteen cases of milk powder and butter oil were received from the Hon. Secretary and Treasurer, Guild of Service and distributed to the inmates.

Home for Destitute Children :—The Corporation Council in its resolution dated 11-10-55 approved of a scheme for the opening of a home for 500 destitute children under the aegis of the Madras City Council for Child Welfare with the financial assistance of the Government and Corporation and public donations. The premises of the defunct Work House was made available for this purpose during the year. In their Order M.S. No. 3670 dated 22-12-55, the Government of Madras declared the Destitute Home for children under the Madras City Council for Child Welfare as a place suitable for the custody of boys and girls between 8 and 16 years of age under the provisions of the Madras Children Act, 1920 (Madras Act IV of 1920). The Home for destitute children was opened on 26-12-55, with 150 boys rounded up within the City limits by the Police and placed under remand and was maintained by the Corporation to be handed over later to the newly formed Madras Council for Child Welfare inaugurated the same day at the place.

The following is the statement showing the strength in the Home during the year under report :

Inmates	Strength on 1-4-55.	Admissions.	Discharges.	Absconded.	Deaths	Transferred to Govt. Reception Home	Strength on 1-4-56
Boys	nil	165	4	nil	nil	146	15
Girls	nil	1	nil	nil	nil	nil	1

Health Education :—Inculcation of public health ideas was carried on by talks and lectures by the health staff. For this purpose the city was divided into 2 units, North and South, and each was in charge of a Medical Officer with aptitude for the work. They attended to this work in addition to their normal work and were paid an allowance. The subjects dealt with in the course of the propaganda were on diseases like malaria, smallpox, typhoid, and leprosy and general topics like food and nutrition, environmental sanitation and personal and domestic hygiene.

The following statement gives the work turned out during the year:—

Area	No. of talks by S.Is.	No. of lectures by M.Os.	No. of Pro- paganda with demonstration	No. of audience attended	No. of leaflets issued.
North Range ...	648	736	125	60,235	4,610
South Range ...	696	548	127	48,395	4,600
Total ...	<u>1,344</u>	<u>1,284</u>	<u>252</u>	<u>1,08,630</u>	<u>9,210</u>

THE MADRAS ZOOLOGICAL GARDEN, 1955-56

The Madras Zoological Garden reached an important stage in its developement and increased in popularity during the year 1955. The Madras Zoo is the first institute of its kind in India, most probably in the whole of Asia, to celebrate its centenary.

The Centenary Celebration:—Sri M. A. Chidambaram, Mayor of Madras, formed a Committee consisting of high officers of the Government and the Corporation and non-officials to celebrate the Centenary of the zoo.

The extent of the zoo was increased from eleven acres to twenty acres. The entire zoological garden was relaid; the old antiquated cages and enclosures were pulled down and modern enclosures built reproducing the natural surroundings in which the animals live in their wild state.

His Excellency the Governor of Madras, Shri Sri Prakasa, inaugurated the Centenary celebration in the presence of a large gathering of the elite of the city. Sri. R. P. Sethupillai, delivered the Commemoration address. An essay competition was conducted and the first prize for the best essay on 'Poetical references to animals and birds in Tamil literature' was awarded to Sri Tirumalai Muthuswami, a student of the Thyagaraya College, Madurai.

An interesting exhibition of high educational value was organized within the zoological garden. Literature, posters and photographs received from the various foreign zoos for the occasion were tastefully displayed. A photographic competition and an animal painting contest were held along with the exhibition.

The cages and the approaches to the cages in the zoo were brightly illuminated and it was a wonderful sight to see the animals during night time. The night zoo proved a very novel and attractive feature to the visitors.

Dance and drama performances were arranged every day which attracted a large number of visitors. Pet show, Dog show, Horse show, Poultry show, Fish show etc. were arranged on each day and prizes were given.

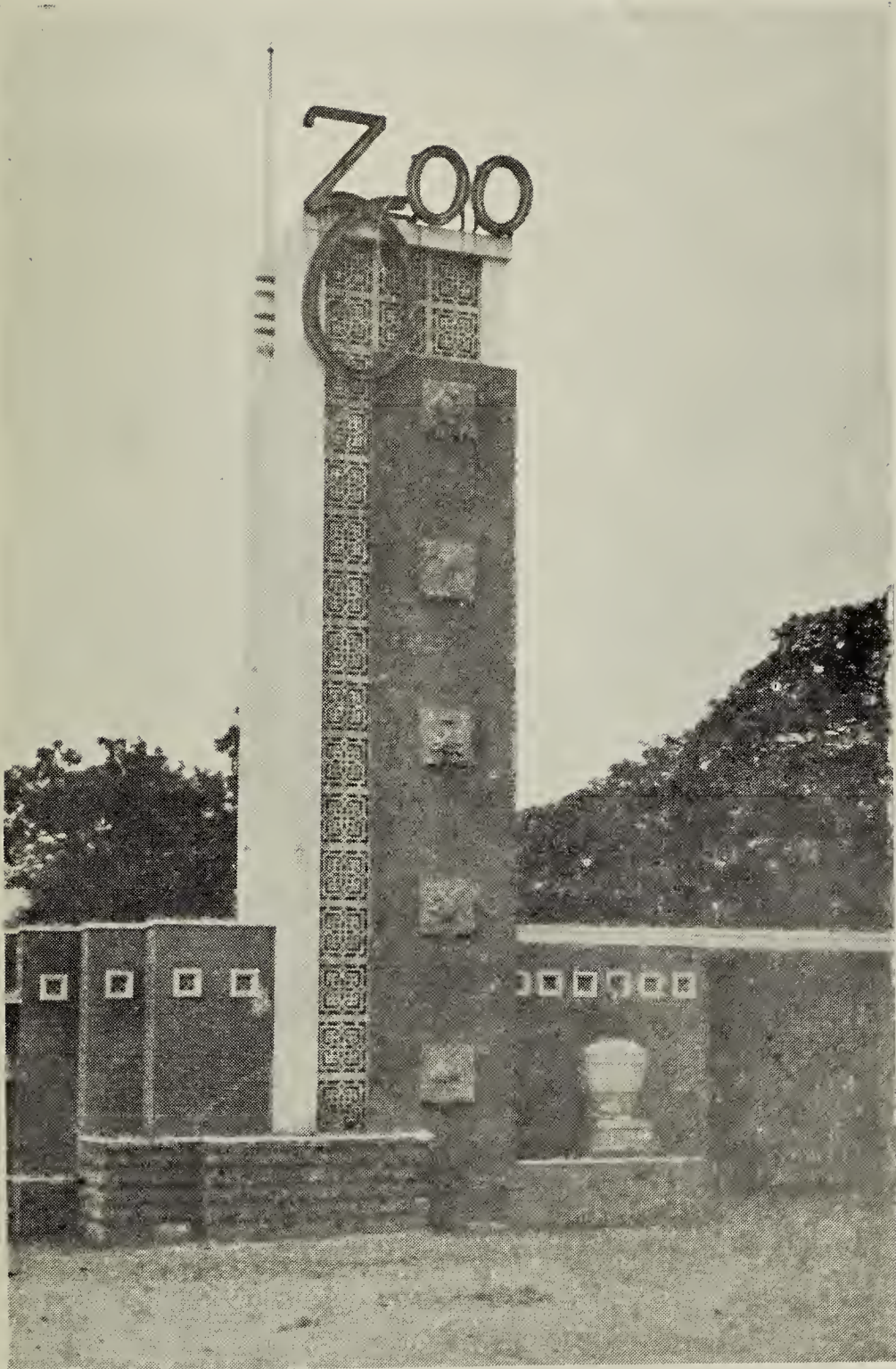
The Celebration lasted for 15 days from the 31st October, 1955 to the 14th November, 1955 and during the course of the celebrations the number of visitors to the zoo may be computed as over 4 lakhs. The collection by way of admission fees amounted to Rs. 52,718-13-6.

The Government of Madras gave a contribution of Rs. 33,188 for the purchase of animals, and an order was placed for a pair of hippopotamuses and a trio of gnus.

The Government of Andhra kindly contributed a sum of Rs. 5,000.

Many local firms came forward with decent donations for the construction of various enclosures as listed below:—

Messrs. Gannon Dunkerly & Co., Ltd., built a modern enclosure for the Chimpanzees at a cost of Rs. 12,000.



Main entrance of the Zoo with an inset showing the evolution tower

Messrs. India Cements Ltd. gave a sum of Rs. 5,000 for the construction of a monkey enclosure.

Messrs. McKenzies Ltd., constructed a crocodile tank costing about Rs. 5,000.

Messrs. Buhari Hotels donated a sum of Rs. 7,500 for the construction of a pheasants' aviary.

On the whole a sum of Rs. 1,97,952/- was collected including the donations, gate returns and other incomes. An expenditure of Rs. 62,790/- was incurred towards the celebrations.

An attractive souvenir was prepared for the occasion. Many foreign zoos sent messages of congratulations and valuable gifts of animals which are listed elsewhere.

The Government of Mysore, on request, kindly sent their African Cheetah, the only one of its kind in captivity in India and the centenarian tortoise from the Mysore zoo for exhibition during the centenary. After the celebrations they were carefully sent back.

Arrangements were made to purchase a trio of giraffes, five pairs of African monkeys, four pairs of African love-birds, and a trio of ostriches. These animals could not be brought before the centenary for want of shipping facilities and they arrived after the centenary.

To Commemorate the centenary celebrations a new architectural entrance with a 36 feet high tower, named 'The Evolution Tower' was built. The evolution tower bears five panels of beautiful rock-cut sculptures depicting the five stages of the Darwin's theory of evolution, viz. the fish (pisces,) frog (amphibia,) snake (reptilia,) bird (aves,) and ape (mammalia). The rock-cuts were presented by Sri M. A. Chidambaram Mayor of Madras.

New enclosures were built to give the animals a natural setting, and to enable the visiting public to have a better view of them.

Visitors :—During the year the centenary celebration was largely responsible for the phenomenal increase in the number of visitors. During the celebration alone it is estimated that at least about 4 lakhs of people visited the zoo. On account of the increased popularity the zoo attracted in the usual way on other days about 4 lakhs of adults and a lakh of children.

Distinguished Visitors :—His Excellency the Governor of Madras, as stated earlier, presided over the centenary celebrations. Sri. K. Kamaraj, the Hon'ble Chief Minister, laid the foundation stone of the Children's Zoo in the presence of a very large gathering of School Children. He suggested the construction of a wall on the eastern side by the side of the Buckingham Canal.

Sri C. Subramaniam, the Hon'ble Minister for Finance, opened the new Zoo canteen in the bird island. He took keen interest in the development of the zoo, and helped the zoo to get a contribution of Rs. 33,188 from the Government.

Sri. M. Bakthavathsalam, the Hon'ble Minister for Agriculture, opened the Crocodile tank. Sri A. B. Shetty, the Hon'ble Minister for Health, opened the pheasant aviary, Sri. B. Parameswaran, the Hon'ble Minister for Transport opened the otter pool. Sri. M. A. Manickavelu the Hon'ble Minister for Revenue, opened the aquatic birds aviary.

Sri. R. Shanmuga Rajeswara Sethupathi, the Hon'ble Minister for Public Works, visited the zoo and expressed his appreciation of the improvements that have been effected.

On 1—5—1955 the first All India Zoo Superintendents Conference was held in Madras, and the Madras Zoo played the host. During

the course of the conference Dr. S. L. Hora, the Secretary General for the Indian Board for Wild Life and the Director of Zoological Survey visited the Zoo with the Superintendents of other Zoos. Shri C. R. Ranganathan, I.F.S., Inspector General of Forests, who presided over the conference also visited the Zoo with Shri I. P. Mathur, Secretary, Minister for Food and Agriculture, Government of India.

The Andhra Chief Minister Sri B. Gopala Reddy visited the Zoo and laid the foundation stone for the construction of the 'Andhra Pavilion'.

Other important visitors were Mr. Peter R. Ryhiner from Switzerland, Major Wunman, the Director of the Ceylon Zoo, Mr. Sosnovsky, Director of the Moscow Zoo, Professor Anton Bruun of the Copenhagen University, Denmark, the Minister for Local Government Punjab and the members of the Punjab Local Government Enquiry Committee accompanied by Sri. K. S. Narya, Deputy Secretary, Sri. Mirza Ismail accompanied by Dr. Krumbiegel, Lt. Governor K. Santhanam and Shri. Khasyap, I.A.S., Deputy Secretary, Local Self Government, Bihar.

The Ministry of Food and Agriculture, Government of India, appointed the Madras Zoo Superintendent as one of the Technical Secretaries of the Zoo Wing of the Indian Board for Wild Life.

Zoo Live-stock :—At the commencement of the year, the Zoo live-stock consisted of 669 specimens consisting of 197 mammals, 451 birds and 21 reptiles.

Acquisitions through births, purchases, inward exchanges and gifts numbered 194 while reductions, due to deaths sale and destruction were 339. There were at the end of the year 524 individual specimens consisting of 223 mammals, 271 birds, and 30 reptiles.

The large reduction was mainly due to the disposal of uneconomical surplus numbers of live-stock like pigeons of which alone 211 numbers were sold.

The following statement will show the details of additions and disposals.

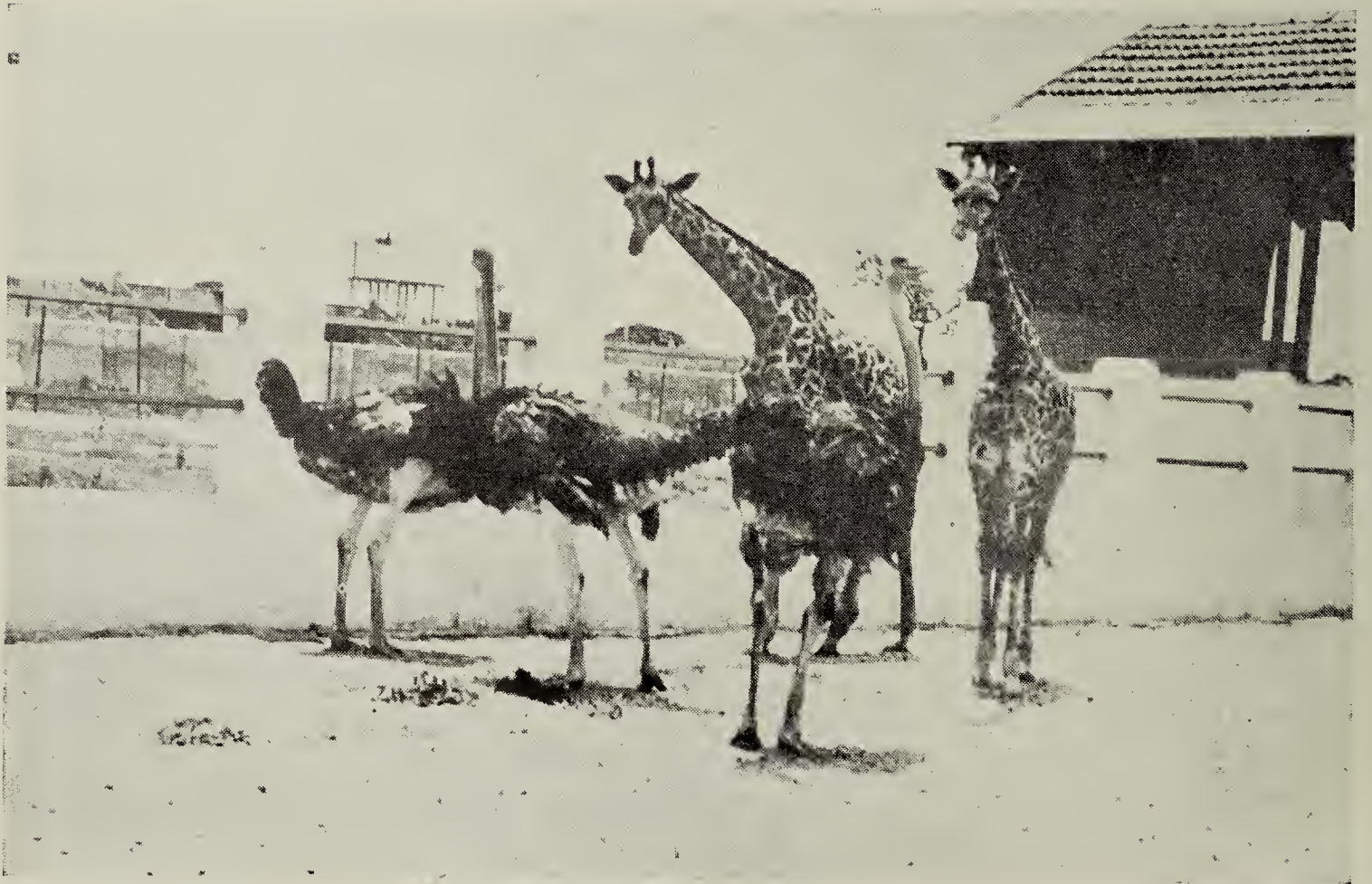
Class	Number at the beginning of the year	Additions					Disposals				Number at the end of the year
		Gifts	Purchases	Births	Exchanges	Total	Sales	Deaths	Destroyed	Total	
Mammals	197	16	11	39	1	67	14	25	2	41	223
Birds ...	451	19	8	70	3	100	239	21	20	280	271
Reptiles ...	21	20	4	3	...	27	2	16	...	18	30
Total ...	669	55	23	112	4	194	255	62	22	339	524

Status of Collection

Class	Species	Specimens
Mammals	49	223
Aves	52	271
Reptiles	9	30
Total	110	524



Polar Bear in the Zoo



Ostriches and Zebras in the Zoo

Purchases:—The most outstanding purchase made during the year is a pair of young Masai giraffes for a sum of £ 800 from a German animal Dealer. A pair of Abyssinian baboons, a pair of yellow baboons, a pair of Sooty Mangabeys, a pair of Capuchins and one Sykes monkey belonging to Africa were also purchased from the same dealer. Another interesting purchase was two pairs of peach-faced love birds and two pairs of black-masked love birds. These birds are the first specimens to be exhibited in the zoo.

Presentations:—A good number of gifts was received from various parts of the world in connection with the Centenary of the Zoo. These gifts are listed below :—

Three European Wolves from the Frankfurt Zoological Gardens, Germany.

One pair of Pacific rattlesnakes and one pair of red diamond rattle snakes from the Sandiego Zoo, California, U.S.A.

One caiman, one boa constrictor and 12 painted turtles from the New York Zoo, U.S.A.

One pair of Layrd's parakeet from the Ceylon Zoo.

One glutton, one polar bear and three pairs of Russian pigeons from the Moscow Zoo, U.S.S.R.

One pair of White Swans from Hagenbeck's Zoo, Hamburg, Germany.

One pair of Crowned cranes from Mr. L. Huhe, Animal Dealer, Hannover, Germany.

One pair of banded krait, one pair of Himalayan bears, one pair of bar-headed geese, one pair of barking deer and a chukor partridge presented by the Calcutta Zoo.

One Eclectus parrot presented by the Proprietor, Spade Clover Beedi Factory, Madras.

One Ratel presented by the Gemini Circus.

One white crow presented by Sri. Jayakumar Ansgar.

Births and Hatches:—Civet cat 1, Spotted deer 10, Guinea pigs 14, Rabbits 9, White bucks 3, Raccoons 2, Night Herons 4, Pigeons 56, Monitor lizards 3, Russian Pigeons 10.

Exchanges:—A barter was executed with a German animal dealer who supplied the giraffes etc., and a trio of ostriches in exchange for a tiger cub and two leopards; a giraffe was also obtained in exchange for an elephant calf. The ostriches and the giraffes were received in the Zoo but the dealer could not take the tiger cub and the leopards. The elephant calf could not be obtained from the Forest Department and therefore it was not supplied.

Sales:—The following surplus animals and birds were disposed of by sale.

Crocodiles 2, Spotted deer 2, Guinea pigs 2, Pigeons 211, Rabbits 10, Fowls 28.

Deaths:—The animals were subjected to unusual strain during the time of the centenary. Intensified lighting arrangements and the unprecedented crowds kept the animals awake for quite a long time. In the course of making arrangements for building the various new enclosures many animals had to be confined in very restricted space for a long time. This coupled with the continued inclement weather and the dampness made the animals sick. This resulted in increased casualty to the live-stock than in the previous year.

The following is the list of animals that died during the period under report.

Civet cats 2, Crocodiles 2, spotted deer 1, White Buck 1, Giraffes 2, Partridge 1, Snakes 10, Rabbits 2, White Crow 1, Tortoises 2, Barking deer 1, Capuchins 2, Sloth bear 1, Malabar Squirrel 1, Black panther 1, Toddy cat 1, Sambar deer 2, Emu 1, Demoiselle Crane 1, Fancy birds 2, Brahminy duck 1, Leopard 1, Lion 1, Jackals 3, Nilgai 1, White pea fowls 2, Green pea fowls 2, Four-horned Antelope 1, Toucan 1, Grey langur 1, Fowls 5, Guinea fowl 1, Pheasants 2, Bar headed goose 1.

Apart from the deaths due to natural causes, one tiger cub and one spotted deer were destroyed by orders. The tiger cub was born with congenital deformity in the hind quarters. Osteological treatment and other steps to improve the condition of the animal having failed, the animal was ordered to be destroyed as the exhibition of a crippled animal was not considered a wholesome display. A spotted deer became a killer amongst the herd and the animal attacked and gored the keepers on several occasions, and in the interests of the other animals in the herd and as a measure of safety to the keepers, the animal was destroyed.

In the course of the year 20 pigeons were killed and used as food for the carnivorous animals.

Proper care and attention have been paid to the feeding and health of the Zoo animals. The death rate worked out to 10.5 as against 7.81 recorded in the previous year. Post-mortem examination was made of all specimens that died during the year and the findings have been recorded as usual. In some cases the help of the Principal, Madras Veterinary College, was obtained for detailed pathological examination.

Towards the end of the year under review there was a sudden outbreak of flea-infestation in the ungulate paddocks. The organism was identified as that of Siphonoptera species. Intensive D. D. T. spraying in the yard was undertaken and all the animals were caught and bathed in the D. D. T. suspension. The timely action helped to arrest further spread of the infestation.

Improvements :—As reported earlier the Zoo underwent a thorough change. 9 acres of land were added to the existing area of 11 acres, and the lay-out of the Zoo was completely relaid. In connection with the centenary of the Zoo, many improvements were carried out during the year under report and they are as follows :

The old gate was demolished and a new tower gate has been constructed at a cost of Rs. 13,000. This is situated about 350 feet away from the old gate. The portion of the road that existed in front of the old gate was annexed to the Zoo Garden and a new road put up along side. The road round the My Lady's Garden from the Royal Swimming Bath has also been added to the Zoological Garden.

Some of the old buildings and antiquated cages in the island were pulled down, and a modern architectural canteen has been constructed at a cost of Rs. 19,000.

The old crocodile and otter pit was demolished and separate tanks for the crocodile and the otter have been built.

The pea-fowl aviary was shifted from the island to a newly erected one near elephant shed alongside the road round the lake.

The road round the lake has been asphalted and it is now made more enjoyable for pedestrians and as well as motorists. The other roads and pathways have been properly levelled and gravelled. New pathways have been laid round the enclosures.



New Canteen in the Zoo

The old aquatic aviary attached to the island has been demolished and a new flight aquatic aviary has been built up enclosing three huge trees to give more natural environment. All the aquatic birds are housed here.

The old Sergeant's quarters have been pulled down and in that place a mokey enclosure with two outer wings on either side has been constructed.

A very spacious link mesh enclosure with masonry chambers for the chimpanzees has been constructed.

A modern pheasant aviary has been constructed near the elephant shed.

The zebras which were in small separate enclosures adjacent to each other have been removed to one large enclosure on the eastern side, and housed together. Inside the paddocks two sheds have been built to provide shelter for the zebras.

A common shed for the antelopes and deer also has been built in the north-east corner.

The existing giraffe enclosure has been extended and a spacious shed has been built adjoining the old one. The giraffes and the ostriches have been housed together as seen in their habitat in Africa.

The old antiquated small-cat's house has been remodelled and an outing yard enclosing a living tree and a small tank has been constructed. This enclosure is shared by the raccoons, porcupine, civets, ratel and the red foxes.

The newly added area on the eastern side adjacent to the canal has been levelled and for nearly 600 yards has been fenced and the ruminants are housed in this area in view of the space available for their free movement.

The Sirpa-griha has been permanently electrified.

The lawns and borders have been relaid and new lawns have been formed. Casurina saplings have been planted alongside the canal to prevent the infiltration of smoke from the railway steam engines in the Central Station yard.

The work of constructing a compound wall along the canal side was taken up and the work is in progress.

The construction of a spacious enclosure for the hippopotamuses has been started.

Revenue :—The right of collecting fees for admission to the Zoo and at the cycle stands during the year under report was let on lease for a sum of Rs. 1,05,000. The contract was suspended for a month during the centenary celebrations when the gate returns were collected departmentally.

The canteen :—The right of running the canteen was let are for a sum of Rs. 4,375 for the year under report.

Boating :—Boating in the Zoo lake continued to be as popular as ever before. Seven boats plied in the lake. The right of collecting fees for plying pleasure boats during the year under report was let on lease for Rs. 4,025. It is estimated that about 70,000 people including children enjoyed boating in the lake.

Cameras :—410 Still cameras and 13 cine cameras were admitted and a sum of Rs. 449 was realised in this behalf.

Hire of animals :—The elephants and camels were hired out for film purpose on 4 occasions. These animals were also hired out for processions with in the city limits on 15 occasions. A sum of Rs. 1,600 was realised as hire charges.

Joy rides :—Joy rides on camels, elephants and the pony were given and a sum of Rs. 346 was collected towards fees for rides.

Sale of animals :—A sum of Rs. 568 was realised by the sale of surplus animals and birds.

Sale of dung :—162 cart loads of elephant dung were sold as manure, and a sum of Rs. 486 was realised.

HEALTH EDUCATION

Inculcation of public health ideas was carried on by talks and lectures by the health staff. For this purpose the City was divided into 2 units, North and South, and each unit was in charge of a Medical Officer with aptitude for the work. They attended to this work in addition to their normal work and were paid an allowance. The subjects dealt with in the course of the propaganda were on diseases like malaria, smallpox, typhoid and leprosy and general subjects like food and nutrition, environmental sanitation and personal and domestic hygiene.

The following statement gives the work turned out during the year.

Area	No. Talks by S. Is.	No. of lectures by M. Os.	No. of Pro- paganda with de- monst- ration.	No. of audience attended.	No. of leaflets issued.
North range ...	648	736	125	60,235	4,610
South range ...	696	548	127	48,395	4,600
Total ...	<u>1,344</u>	<u>1,284</u>	<u>252</u>	<u>1,08,630</u>	<u>9,210</u>

Food Control

Markets :—There were 8 public markets and 42 private markets. The 8 public markets were maintained by the Corporation at the following places :—

1. Smithfield market, Avathanampapier Road, 17th division.
2. Corporation market, Market Road, 21st division.
3. Moore market Poonamallee High Road, 26th division.
4. Mallaya market, Wall Tax Road, 27th division.
5. Fruit market, Netaji Subash Chandra Bose Road, 28th division.
6. Jaganathapuram market, Jaganathapuram, 33rd division.
7. Corporation Vegetable market, Sir Theagaraya Road, 36th division.
8. Razack market, Bazaar Road, 47th division.

With a view to eliminate way side vending of food stuffs in Jaganathapuram, Chetput, platforms were provided and leased to a contractor for maintaining it as a public market as a temporary measure.

The 42 private markets were periodically inspected by the divisional sanitary staff to ensure their sanitary upkeep and prevent the sale of food-stuffs unfit for human consumption. Before issuing the annual licences to the owners of the various markets, they were required to attend the annual repairs, lime washing and repainting works. They were also required to provide indication boards to the fish stalls and make special arrangements for keeping these stalls clean and hygienic. This was done in view of the attitude of the Government Fisheries Department for giving an impetus to the sale of fish in the City.

The problem of vendors squatting on roadsides was tackled by the divisional staff with the help of the police wherever necessary. The unauthorised vendors who were chased away returned to the spot after some time. The adoption of guerilla tactics on the part of the wayside vendors made

ineffective the efforts of the divisional staff to prevent wayside vending in insanitary and unauthorised places. With a view to make sustained efforts a proposal was afoot to organise special drives and keep them up until the evil was put an end to.

The divisional staff during their inspections seized unwholesome and noxious foodstuffs and had them destroyed to prevent their consumption particularly by the poor people of the City. This consisted of rotten vegetables, decayed fruits, stale edibles and food rendered unfit for human consumption by dust and fly settling on them. The quantity so destroyed was about 25 lorry loads, most of which were sprinkled with disinfectants and buried in the dumping grounds.

Action was also taken to prosecute unauthorised vending by prosecuting the offenders in this behalf. During the year under review 387 prosecutions were launched under the Madras City Municipal Act and 131 prosecutions under the Madras Public Health Act.

The private mutton stalls and pork stalls were periodically inspected to enforce their proper maintenance and to prevent the sale of unauthorised meat.

Slaughter-houses:—The Corporation continued to maintain 3 slaughter-houses at Perambur and 1 at Saidapet. The 3 slaughter-houses at Perambur were for the separate slaughter of sheep and goats, cattle and pigs. The slaughter house at Saidapet was for the slaughter of sheep and goats only. The necessity for a pig slaughter-house at Saidapet was keenly felt and the construction of a pig slaughter-house is under active consideration.

The two Assistant Veterinary Surgeons in charge of these slaughter houses did ante-mortem and post-mortem examinations of the animals and carcasses respectively. They rejected unhealthy animals and condemned unwholesome carcasses and organs.

The outturn of work in the 4 slaughter-houses was as follows :—

Kind of animals	No. of animals brought for slaughter	No, condemned	No. slaughtered	No. of carcasses condemned after post-mortem	No. of organs condemned after post-mortem
Sheep and goat	4,84,831	1,756	4,83,075	3	7,423
Cattle	24,741	25	24,716	62	6,523
Pig	759	nil	759	3	393

Note :—590 stray pigs were slaughtered after release to the claimants.

As an experimental measure two specially designed motor vans were introduced from 1-12-'55 for the transport of carcasses from the sheep slaughter houses to the various markets in the City. A fee of 2 annas per carcass was collected for transporting it in the motor vans. The sanction of the S. C. (T&F) was obtained on 2-6-'55. It is the ultimate object of the Department to cover the transport of all the carcasses by stages making such arrangements as may be necessary to avoid delay in transport and hardship to the butchers.

WORK HOUSE

Introduction:—The Industrial Home for able-bodied beggars continued to serve the cause of socially handicapped men and women. Beggars committed to the Home for the offence of begging under the provisions of the Madras City Police Act were given training in useful industries like handloom weaving, cooking, coir rope making, tag making and gardening to enable them to earn a living after their discharge.

The State Government started a Care Camp in 1953 for the welfare of able-bodied beggars at Melapakkam, Avadi. It was therefore decided to close the Work House and convert it into an institution for taking care of and training under-privileged destitute children. This Home for destitute children was opened by Hon'ble Sri C. Subramaniam Finance Minister, Govt. of Madras, in the Orphanage premises on 26-12-1955. An association under the registered name of "The Madras City Council for Child Welfare" was inaugurated on that day by Srimathi Durgabhai Deshmuk, Chairman, Central Social Welfare Board. It had powers of budgetary and administration control, over the Children's Home, to regulate admissions to lay down policies and to prescribe the handicrafts to be taught to the inmates. The Madras Rotary Club equipped the Home on the occasion with tools and implements at a cost of Rs. 25,000/- for running a workshop which was opened by Sri C. D. Dushmukh, Union Finance Minister, on the same day.

Strength :—There were 70 inmates at the beginning of the year, of which 59 were men and 11 women with 8 children. During the year 79 men and 33 women with 5 children were committed to the Home for periods ranging from six months to two years. 65 men and 13 women with 9 children were discharged after due expiry of their term of committal. There were 5 deaths, 4 transfers of leprosy cases to the Special Home and 2 escapes. On 22-10-55 the female section was closed and the women inmates numbering 23 with 3 children were transferred to the Government Care Camp. The male section was closed on 7-1-56 and the 64 inmates were also removed to the Care Camp. The following statement gives details sex-wise.

Inmates sex	Strength on 1-4-1955	No. of Admis- sion.	No. Dis- charged.	No. abscon- ded.	Dea- ths.	Transfers to				Strength on 1-4-56
						*M	H.	G.H.	S.H.	C.C.
Men	59	79	65	nil	3	nil	3	3	64	nil
Women	11	33	13	2	2	2	1	1	23	nil
Children	8	5	9	nil	nil	nil	nil	1	3	nil

* M.H. Mental Hospital
S.H. Special Home.

G.H. Goshala Home.
C.C. Care Camp.

The following is a district-wise list of the inmates of Work House for the year 1955-56 :—

Ambur	...	3	Madras	...	80
Arkonam	...	2	Madurantakkam	...	2
Bangalore	...	1	Madura	...	3
Bihar	...	3	Nagpur	...	1
Cawnpore	...	1	Nellore	...	3
Chingleput	...	6	Palghat	...	1
Coimbatore	...	1	Puttur	...	2
Collam	...	2	Raichur	...	1
Cuddalore	...	1	Rishibandam	...	1
Cuddapah	...	1	Sakem	...	4
Delhi	...	1	Sholingur	...	1
Dindigul	...	5	South Malabar	...	3
Erode	...	1	Tanjore	...	1
Giddalore	...	1	Tiruchi	...	2
Guntur	...	1	Tiruvannamalai	...	1
Haridwar	...	1	Uriyur	...	1
Kakinada	...	1	Vellore	...	1
Kovilpatti	...	1	Villupuram	...	2
Kumbakonam	...	1	Vizagapatnam	...	1
Kozhikode	...	1			

Medical Relief:—Minor ailments were attended to in the Work House dispensary. The Government Stanley Hospital continued to receive cases for specialised treatment. There was a case of hydrocele and the patient was admitted in the Government Stanley Hospital under escort, cured and brought back. There were, during the year, two cases of lunacy amongst women committed to the Home and they were arranged to be transferred to the Government Mental Hospital, Kilpauk, with the orders of the Committal Magistrate. The deaths were mainly due to old age and debility and the percentage of death was 3.

Visitors:—The Collector of Madras, the Deputy Commissioner of Police, the Inspector General of Prisons, visited the Home and recorded their observations in the Visitor's Book. The following were the distinguished visitors to the Home:—

(1) The Chairmen of Municipalities and of Local Boards in South India visited jointly on 4-6-55 and expressed their appreciation of the Home as a correctional institution for beggars.

(2) Sri T. M. Ramaswami, Madura Municipal Commissioner, visited on 17-8-55.

(3) Health Officer, Jaffna, Ceylon, on 25-8-55.

(4) Chief Executive Officer and Ex-Mayor of Nagpur, Corporation on 27-8-55.

(5) Health Officer, Nigeria, on 5-9-55.

(6) Minister for Labour and Social Welfare, Uttar Pradesh, on 31-12-55.

Improvements:—Electric motor attached to the well in Work House was repaired. Some withered trees were pulled down with the help of the inmates. The work of colour washing buildings of the Home, painting of doors, reflooring the kitchen yard etc., was attended to by the Works Department. The inmates were provided with an open court of playing volley ball.

Gifts:—Twenty cartons of American Milk Powder were received on 28th June '55 direct from the Assistant Director (Clearance) Madras Port, Madras, for serving milk to the inmates of the institutions.

2. Another consignment of 20 cartons of milk powder and 10 cartons of butter oil, each carton containing 6 cans, were received on 4-11-55 from the Assistant Director (Clearance) Madras Port.

3. Four barrels of American Butter Oil were received from stock gifted to the Madras Corporation by the Archbishop of Madras.

4. Rasam Powder was obtained as gift on 5th July 1955 from Messrs. P. Venkatachalam, Indian Condiments Manufacturers.

5. Proprietors of Kareem Beedi, Taj Mahal Beedi, Governor Beedi, Sait Beedi, Mangamma Beedi, Original Shanmugam Snuff, Shamsuddin Snuff continued their supply of free beedies and snuff for the use of inmates.

Occupational Therapy:—The inmates were engaged in work by way of occupational therapy.

The statement below shows the number of inmates trained in the various sections:—

		Males	Females.
1. Weaving	...	52	...
2. Pirhs Winding	...	...	2
3. Tag making	...	9	...

		Males.	Females.
4.	Rattan work	...	4
5.	Cooking	...	3
6.	Gardening	...	8
7.	Coir rope making	...	37
			31

They produced the following items of articles :—

Bandage and dungry cloth :—

		<i>Estimated value</i>		
		Rs.	A.	P.
21,800 yds, of Bandage cloth	...	12,262	8	0
7,376 „ of blue dungry cloth	...	4,916	0	0
42 pieces of red dungry cloth	...	336	0	0

Towels, bed sheets and table cloths :—

1507 Nos. towels 2 yds at Rs. 2 each	...	3,014	0	0
176 „ „ 1½ „ Rs. 1-4-0 „	...	220	0	0
674 „ white bed sheets at Rs. 5-7-0 „	...	3,650	3	0
9 „ green table cloth at Rs. 6-8-0 „	...	59	8	0
30 „ blue table cloths at Rs. 6-0-0 „	...	180	0	0
Total	...	24,636	3	0

Tags :

16,900 Nos. of 6" size	...	100	14	0
15,800 „ of 4" „	...	47	6	5
		148	4	5

Coir rope :

464 lbs. in weight ¾" size coir rope	...	261	0	0
521 „ „ ⅛" do	...	293	1	0
1188 „ „ ⅜" do	...	668	4	0
1828 „ „ ½" do	...	1028	4	0
Total	...	2250	9	0

*Rattan articles :—*4 Nos. Large size trays.

The value of finished articles worked out to Rs. 27,116-5-5 while the raw materials used costed Rs. 6,652-9-0.

During the year, articles were disposed of by sales on credit and for cash. The total proceeds from credit sales were Rs. 21,228-8-3 and from cash sales were Rs. 63-0-2.

*Gardening :—*3,514 lbs. of vegetables were cultivated in the Home. The estimated value of the vegetable products cultivated in the garden worked out to Rs. 251-10-6.

Recreation :—Radio programmes were broadcast daily between 5 P. M. and 9 P. M. and throughout the day on holidays. The inmates played volley ball, ring tennis, carrom board and other games.

A night school was run for the men's Section and there were two Secondary Grade Teachers to conduct classes. The inmates were taught to read, write and work arithmetic in their own mother languages.

Staff :—The staff of the institution was as follows :—

Superintendent (a non medical personel)	...	1
Medical Officer (part time).	...	1
Clerk	...	1
Cheif Warders	...	2
Male Warders	...	12
Women Guards	...	6
Instructor (weaving)	...	1
Instructor (Rattan)	...	1

Expenditure :—The expenditure incurred in work House ending 31-3-56 was as follows :—

		Rs.	A.	P.
Establishment	...	14,807	11	0
Labour	...	2,295	2	0
Food	...	10,924	14	0
Contingencies	...	24,795	5	5
Total	...	52,820	0	5

SPECIAL HOME

The year 1955-56 opened with 179 inmates in the Special Home. The total number of admissions during the year was 443 of which 3 men and 1 woman were transferred from Corporation Work House and 3 men and 1 woman from the Goveenment Care Camp as they were found to be diseased. The total number of disposals was 314 of which 225 were discharged after the Completion of their detention period, 9 were transferred to Daya Sadan Care Home, 45 were released under Rule 69·9 escaped and 26 died. The particulars are tabulated below :—

Particulars	Men	Women	Total
Strength on 1-4-55	146	33	179
No. admitted during 1955-56	355	80	435
No. transferred from Corpn. Work House	3	1	4
No. transferred from Govt. Care Camp	3	1	4
No. discharged	184	41	225
No. transfered to Daya Sadan Care Home	5	4	9
No. released under rule 69	39	6	45
No. escaped	9	—	9
No. died	22	4	26
Strength on 31-3-1956	248	60	308

List of Distriricts to which the inmates stated they belong to is given below :—

Nome of District.	No. of Inmates.
Madras City	113
Chingleput	34
Arcot	22
Tanjore	9
Malabar	7
Madura	7
Trichy	5
Chittore	4
Salem	2
Tinnevelly	2
Mysore	2
Pondicherry	2
Nellore	2
Guntur	1
Travancore	1
Ramnad	1
Hyderabad	1
Ganjum	1
Coimbatore	1
Northern India	4
Wanderers	222
	<hr/>
Total	443
	<hr/>

The inmates admitted during the year were between the ages of 18 and 87. An age-war classification is furnished below :—

Below 20 years	...	14
Between 20 and 30 years	...	57
„ 30 „ 40 „	...	78
„ 40 „ 50 „	...	110
„ 50 „ 60 „	...	85
Over 60 years	...	99
		<hr/>
Total	...	443
		<hr/>

The nature of infirmities and the diseases of the 443 inmates is furnished in statement 'A' attached herewith.

The periods of committal of the inmates varied from 6 months to 3 years.

Medical Treatment :—Almost all the cases admitted into the Home were in a very bad state of health. They were extremely emaciated on account of starvation and malnutrition besides suffering from chronic incurable diseases. The cases of leprosy which formed the majority were treated with Sulphones and Hydro-Carpus oil and their ulcers were dressed regularly. Cases of other diseases also received suitable treatment. Cases

requiring specialised medical treatment were referred to the following Hospitals :—

Name of Hospital.	No. of cases referred to
The Government Royapettah Hospital	17
The Government General Hospital	12
The Government Kasturba Gandhi Hospital	8
Corporation Infectious Diseases Gandhi Hospital	2
Corporation T. B. Clinic	2
	<hr/> 41 <hr/>

As a result of the nutritious food and appropriate medical attention given, the inmates improved in their general health and appearance remarkably and gained in weight from 20 to 30 lbs.

Disposals :—After allowing remissions for good conduct and work, 225 inmates were discharged on the completion periods; 9 inmates were transferred to Daya Sadan Care Home as they were originally committed to the said Home; 45 inmates were released prematurely under rule 69; 9 inmates escaped and 26 inmates died. Out of these 26 deaths, 5 were from the residual cases of 179 and 24 from the 443 cases admitted during the year. The death rate of 26 for a total of 622 works out to 4.2% which is markedly low considering the nature of diseases of the inmates and their social condition. One of the deaths occurred in the Government Royapettah Hospital and the others in the Home itself. The causes of death are as follows :

Cause of Death	Men	Women	Total
Septicaemia Complicating Leprosy	4	...	4
T. B. Enterities	3	...	3
Chronic Dysentery	4	1	5
Diarrhoea	3	...	3
Nutritonal Oedema	1	...	1
Senility	3	1	4
Nephritis	1	...	1
Carcinoma	...	1	1
(Carcinoma Breast with secondaries in lungs and liver)			
Hypertension	...	1	1
Cerebral-haemorrhage	1	...	1
Gastro-enteritis	1	...	1
	<hr/> 21	<hr/> 2	<hr/> 25 <hr/>

Chronic-Nephritis was the cause of death of the inmate in the Government Royapettah Hospital.

Visitors :—The official, non-official and ex. officio visitors who visited the Home regularly. The following were the distinguished visitors to the Home during the year.

1. Sri V. M. Ghatikachalam, Secretary, Daya Sadan, visited on 27-6-1955.

2. Sri T. M. Ramaswamy, Municipal Commissioner, Madura visited on 19-8-1955.

3. Mr. Jones M. D. of Nigeria visited on 5-9-1955.
4. Mrs. Helene Moss, M. P. H. from U. S. A. visited on 17-9-1955.
5. Sri. V. K. Ramaswamy, Member, Legislative Assembly, visited on 15-10-1955.

*Free Gifts :—*The particulars of gifts given to the inmates during the year are furnished below :—

Date	Name of Doner	Nature of Gift	Occasion
7-4-55	Sri. Jumarmull Sowcar	Iddli & Jangri to all inmates	oli Parva
18-5-55	Sri. S. Satyamurthy, C. A. O. Corporation of Madras	Rs. 50 for the preparation of Semiya Payasam, Vadai, plantain fruits, appalams, coffee & betel nut to all inmates	Upanayanam Ceremony of his son
1-6-55	People of America	120 tins of Milk Powder	Good will
20-6-55	Sri. Jumarmull Sowcar	Iddli & Jangri to all inmates	Solar Eclipse
8-7-55	People of America	4 drums of butter oil	Good will
16-7-55	do	17 tins of salted butter	do
29-7-55	do	10 cases of cotton seed oil & 4 cases of snorting (cotton seed oil)	do
9-8-55	Sri. Kheveraj Chordia	Sweet Boondi & Plantains to all inmates	Death anniversary of son
15-8-55	Corporation Council	Rs. 25 for special treat to inmates	Independance Day
16-8-55	People of America	330 lbs. of Butter oil	Good will
29-9-55	Corporation Council	Rs. 75 for special dishes	Inauguration Day
9-11-55	People of America	540 lbs. of Milk Powder and 330 lbs. of Butter oil	Good will
26-1-56	Corporation Council	Rs. 98-4-9 for special food to inmates	Republic Day
12-3-56	Harichand Ratan Chand Nahar	Jelebi & Mysore Pauk to all inmates	Death ceremony of mother

The 17 tins of salted butter gifted by the People of America and received on 16-7-55 were used in the Home by melting and serving it to the inmates. The other oils supplied were utilised for frying and seasoning purposes and this precluded the necessity for the purchase of gingilly oil from the Contractor. Half the requirement of milk of the Home was met from the American Gift of powdered milk and a saving in the expenditure on milk was effected.

All the free gifts and feasts were gratefully appreciated by the inmates, The thanks of the Corporation are due to the donors for their generosity towards the poor inmates of the Special Home.

Amenties :—Radio music provided entertainment to the inmates of the Home. They also engaged themselves in playing such indoor games as ' Pachisi ' and ' Tiger ' and lambs '.

Occupational Therapy :—Such of the inmates as could work were engaged in textile weaving and gardening and some other light work such as keeping the premises clean. The following articles of linen were produced during the year.

		Cost of raw material used.	Value of produce at market rate.
Bandage cloth 1820 yards	...	Rs. 183 0 0	Rs. 455/- at As. 4/- per yard.
Twill Cloth 400 yards	...	Rs. 170 0 0	Rs. 400/- at Rs. 1/- per yard.
Gada cloth 198½ "	...	Rs. 144 0 0	Rs. 297/12- at Rs. 1/8 per yard.

The bandage cloth produced was utilised in the Home itself for dressings. With the sewing machines in the Home, some of the inmates stitched the twill and gada cloth into Jubbas for the inmates. About a score of inmates worked every day in textile weaving and an equal number in gardening.

Home Garden :—Various kinds of greens and vegetables like plantains, tomatoes, gourds and radish weighing 8,133 lbs. were produced in the Home and they replaced the Contractor's supply on 131 occasions. The value of the garden produce came to Rs. 593-0-6 at the contract rate of Rs. 0-1-2 per lb.

The Staff of the Institution was as follows :—

Superintendent cum Medical Officer	...	1
Nurses	...	4
Clerk	...	1
Compounder	...	1
First Grade Warder	...	1
Second Grade Warder	...	13
Male Ward Attendants	...	4
Female Ward Attendants	...	5
Peons	...	3
Cooks	...	4
Male thoties	...	8
Female thoties	...	5
Dbobies	...	3
Barbers	...	2
Gardener	...	1

Expenditure :—The expenditure incurred in Special Home ending upto 31-3-1956 is as follows :—

Establishment	...	Rs. 29,989	13	0
Labour	...	11,606	15	0
Food	...	33,495	8	11
Medicines	...	2,000	0	0
Contingencies	...	14,038	11	10
Total	...	91,131	0	9

STATEMENT 'A'

	Leprosy		Respiratory System		Alimentary System		Central Nervous System		Skin		Venereal		Circu- latory System		Special Organs		Cancer		Totals																									
	Infective	Non-Infective	Asthma	Bronchitis	Tuberculosis	Gastritis	Enteritis	Peptic Ulcer	Mental Neurosis	Paralysis Agitans	Hemiplegia	Epilepsy	Bell's Palsy	Peripheral Neuritis	Scabies	Fungus	Sticture Urethra	Syphilis		Oldema	Anemia	Tracheogomy	Blind	Deaf	Dumb	Growths	Malignant																	
Males	8	82	2	2	6	8	15	5	13	2	2	4	1	2	5	2	1	3	4	30	1	8	2	2	1	2	3	2	1	3	1	1	2	3	2	1	3	1	1	2	—	59	76	361
Females	—	5	—	1	2	2	5	...	5	—	—	—	—	—	2	—	—	1	—	12	—	4	—	1	—	2	—	—	—	—	—	1	—	1	2	—	—	—	—	1	22	16	82	
Total	8	87	2	2	8	10	20	5	18	2	2	4	1	2	7	2	1	4	4	42	1	12	2	3	2	4	3	2	1	3	1	1	2	1	81	92	443							

ANTI-MALARIAL WORK

There was a separate section for carrying out general anti-malarial operation in the City and it was under the charge of a Medical officer with public health qualifications in the grade of a second class Health Officer. He was assisted by 5 trained supervisors. The supervisors were trained in malarial operations in the Central Malaria Laboratory. The operational personnel consisted of 8 *Stegomyia* Overseers, 50 Malaria Maistries and 313 coolies. The complement of labour was divided into squads and gangs and distributed for work according to the requirements of mosquito control work in each division.

The main function of the entire malarial operation was the control and the eradication of the malaria carrying mosquitoes. The carriers prevalent in the City being *A. Stephensi* and *A. Culcifacies* and their breeding was effectively checked.

Control of Anopheline Mosquitoes:—Of the two vectors of malaria *Anopheles Stephensi* and *Anopheles Culcifacies*, the former were found to breed in domestic wells in the City. Every well was, therefore, periodically inspected by the fish gangs who removed all floating matter from them and then examine for the presence of larvæ. If any breeding was noticed, the well was treated with D. D. T. solution of the destruction of larvæ. Larvicidal fish were then introduced in sufficient numbers. 22,380 wells were thus inspected and attended to in the year under report and kept free of breeding of this species of mosquitoes.

Anopheles Culcifacies were found to breed generally in ponds and tanks in the City. cleaning of private ponds and tanks was undertaken by the department on payment of nominal charges. The amount so collected was Rs. 2,292/- during the year 1955-56. 69 tanks and ponds were cleaned departmentally. Some private tanks were cleaned by the owners themselves but were subjected to constant inspection by the supervisory staff for taking action to prevent larvæ breeding. The tanks cleaned departmentally also received periodical attention from the cleaning gangs. For the removal of algal moss, weeds, etc., and for replenishing them with larvicidal fish, they also removed tank vegetation and trimmed the edges of the tanks.

Anti-Stegomyia Operations:—Special measures were also taken by a special staff for the control of *Aedes-Aegypti* in the region half of a mile around the port. This area was divided into eight sections with one *Stegomyia* Overseer in charge of each with necessary equipment and staff. These 8 squads did intensive inspection of buildings in this area and eliminated larval breeding from neglected drains, cisterns, fire buckets, overhead tanks and other breeding places. The survey of *Stegomyia* mosquito house index has been brought down gradually to as low a figure as 0.02% against 5.9% when the survey was first commenced in 1936.

General Control Measures:—*Culex Fatigans* and *Anopheles subpictus* were the other prevailing mosquitoes. The former breed in storm water drains in the City and in cess-pools in the extended areas, where there is no underground sewerage and the latter along the course of the three waterways, viz, the Cooum river, the Adyar river and the Buckingham Canal. The abatement of nuisance from these mosquitoes formed also a feature of anti-mosquito work. *Culex Fatigans* being carriers of Filariasis, much attention devoted to their control in added areas of Sembium, Ayana-varam, Aminjikarai, Kodambakkam, Mambalam and Saidapet.

To keep the cess-pools in the added areas of the City free from larval breedings, bags of saw dust soaked in a mixture of diesel oil and kersosen oil with D.D.T. dissolved in it to the extent of 2% were immersed with weights and allowed to remain in them. This method ensured the gradual liberation of the oil mixture to form a thin layer of film on the surface of cess-pool sullage and thereby kill the larvæ therein, and also served as a repellent to the female mosquito resorting the cess-pools to lay

eggs. Desilting of cess-pools was done periodically and about 39 lorry loads of silt were removed.

There is a net work of storm water drains about 73.3 miles in extent in the City and section by section those drains were taken for cleaning, brushing and petrolising once in four days. Their periodical attention prevented larvæ from pupating and becoming adult mosquitoes. Kellys drains., a facile sources of breeding in George Town area, received special attention. This drain was flushed with sea water twice a week by the Special Works Department and this step helped to control breeding effectively.

Anopheles Sulepictus was found to breed in the rivers of Cooum and Adyar. The floating moss and algal decomposition formed a facile breeding ground for this species and the presence of matting fibre weeds afforded good shelter to the larval from the attacks of the larvicidal fish. To clear these weeds, a special gang of coolies was engaged. The edges of the water ways were treated with Paris Green, D. D. T. or Gammaxine.

These water ways breed culicines as well in places where there was sewage contamination from storm water drain endings and the drains from pumping stations and such breedings were arrested in the larvæ stage itself.

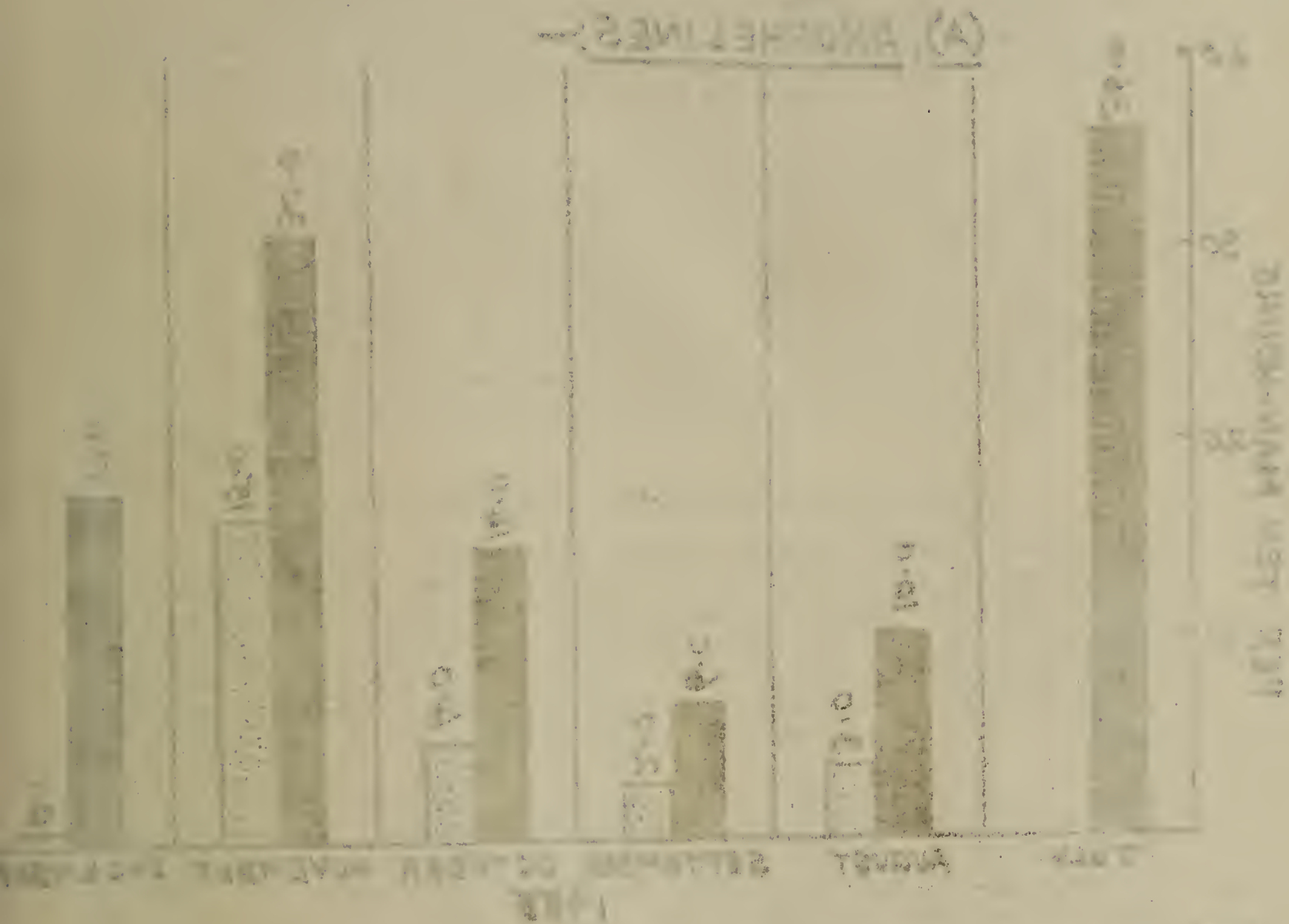
Buckingham Canal formed a breeding place for the *Culex Fatigans* wherever there was sewage contamination in its course and *Anopheles Sulepictus* along its entire length. The edges of the banks were trimmed and weeds and floatage were removed as frequently as possible. Larvicidal fish, *Gambusia*, were stocked in sufficient number to kill larval breeding along its course.

House Inspection Work :—House Inspection squads did weekly inspection of houses in some divisions, to eliminate breeding of mosquitoes. The total number of houses inspected for the year was 3,33,000. During the intensive house inspection carried out by the squads, breedings were eliminated from storing utensils, discarded vessels, tins, broken pots, condemned tyres, etc., found in houses. Such benefit could not be extended to all the divisions for want of sufficient complaints about mosquitoes revealed very often breedings in neglected house drains. In every such case, the breedings were destroyed and the residents of the house required to have the drains cleaned constantly and kept in a state of repair to allow the free flow of water.

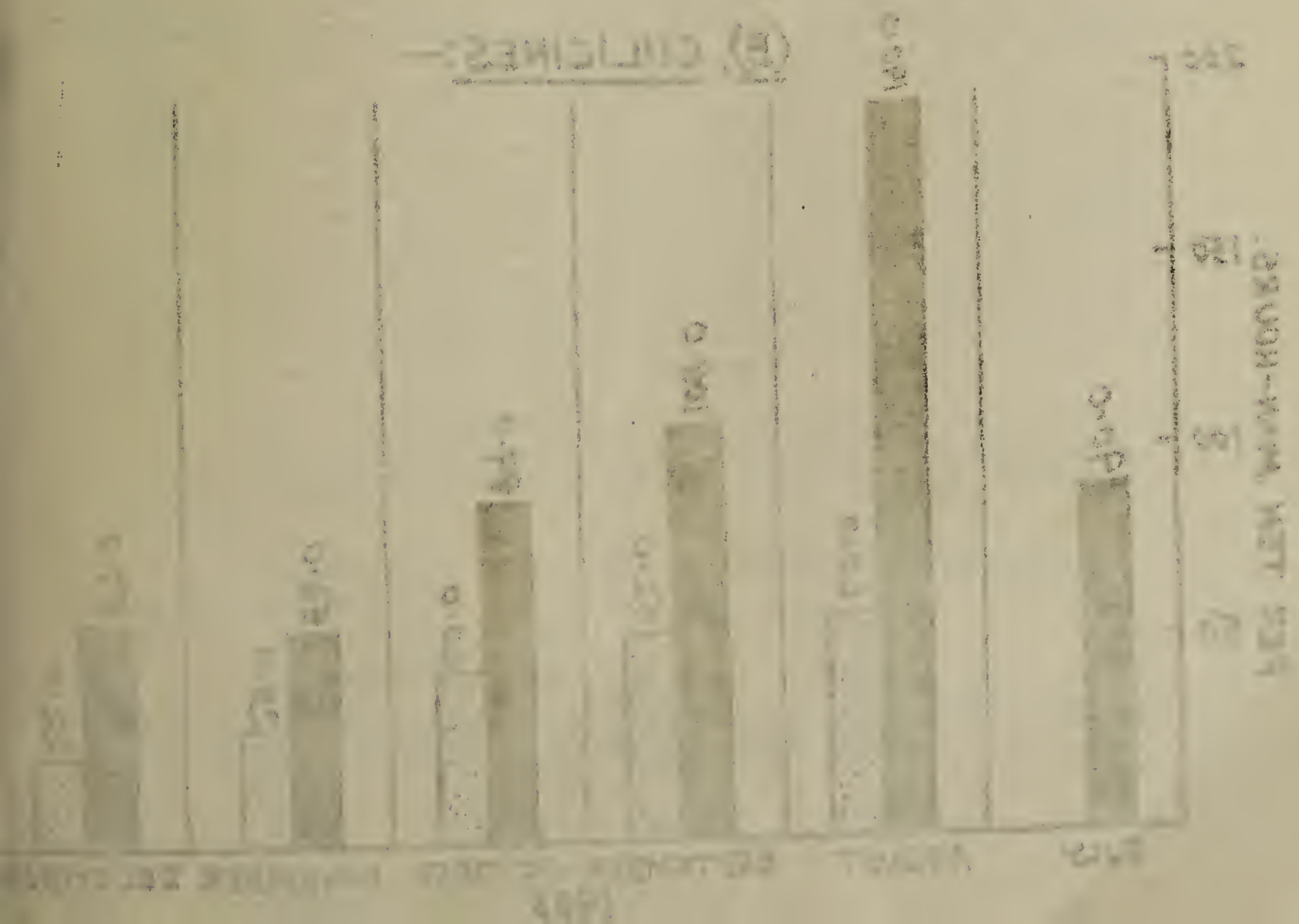
Destruction of Adult Mosquitoes :—Destruction of adult mosquitoes was also undertaken where ever there were complaints of their nuisance in the City. On receipt of complaints, investigations were made and the breedings were detected in place nearby or within bungalows and were destroyed immediately. D.D.T. was the insecticide chiefly used against adult mosquitoes in the form of 5% solution or suspension of anti anophcline and 10% solution against culicines the latter being more resistant. It was sprayed on the wall surface and under roofs relaying on its residual effect on the adult mosquitoes when they visited. A sum of Rs. 5 per 1,000 sq. ft. surface was collected from private parties for such spraying. There were 44 requisitions for the destructions of mosquitoes and other insects in the dwelling houses. These were attended to and the amount collected during the year under report was Rs. 1,108

Malaria Laboratory :—909 specimen tubes of larval collections from houses, wells and over-head tanks were examined, of which 367 were identified as *A Stephensi*, 58 were identified as *A Suphictus* and 484 were identified as *Culicine*.

13 blood smears were examined for malaria parasites till the end of July of the year and 3 proved positive. Thereafter the Senior Entomologist in-charge of the National Malaria Control Programme attended to the work.

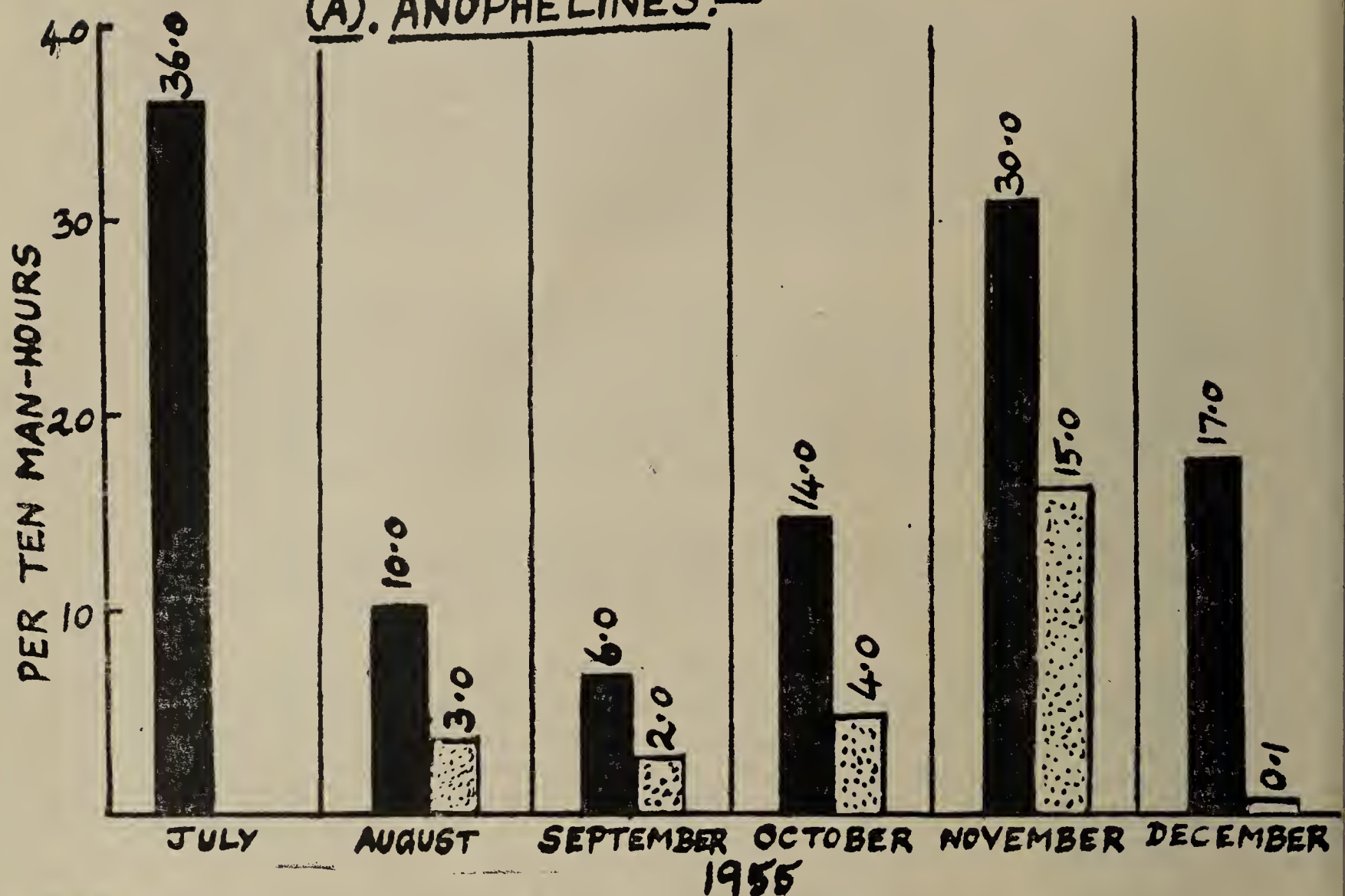


UNSTAYED AREA
STAYED AREA
(NO COLLECTION WORK
ORGANISED IN SEPARATE
AREA DURING DRY)



MOSQUITO DENSITY PER TEN MAN-HOURS IN THE UNSPRAYED & DDT SPRAYED AREAS.

(A). ANOPHELINES:—

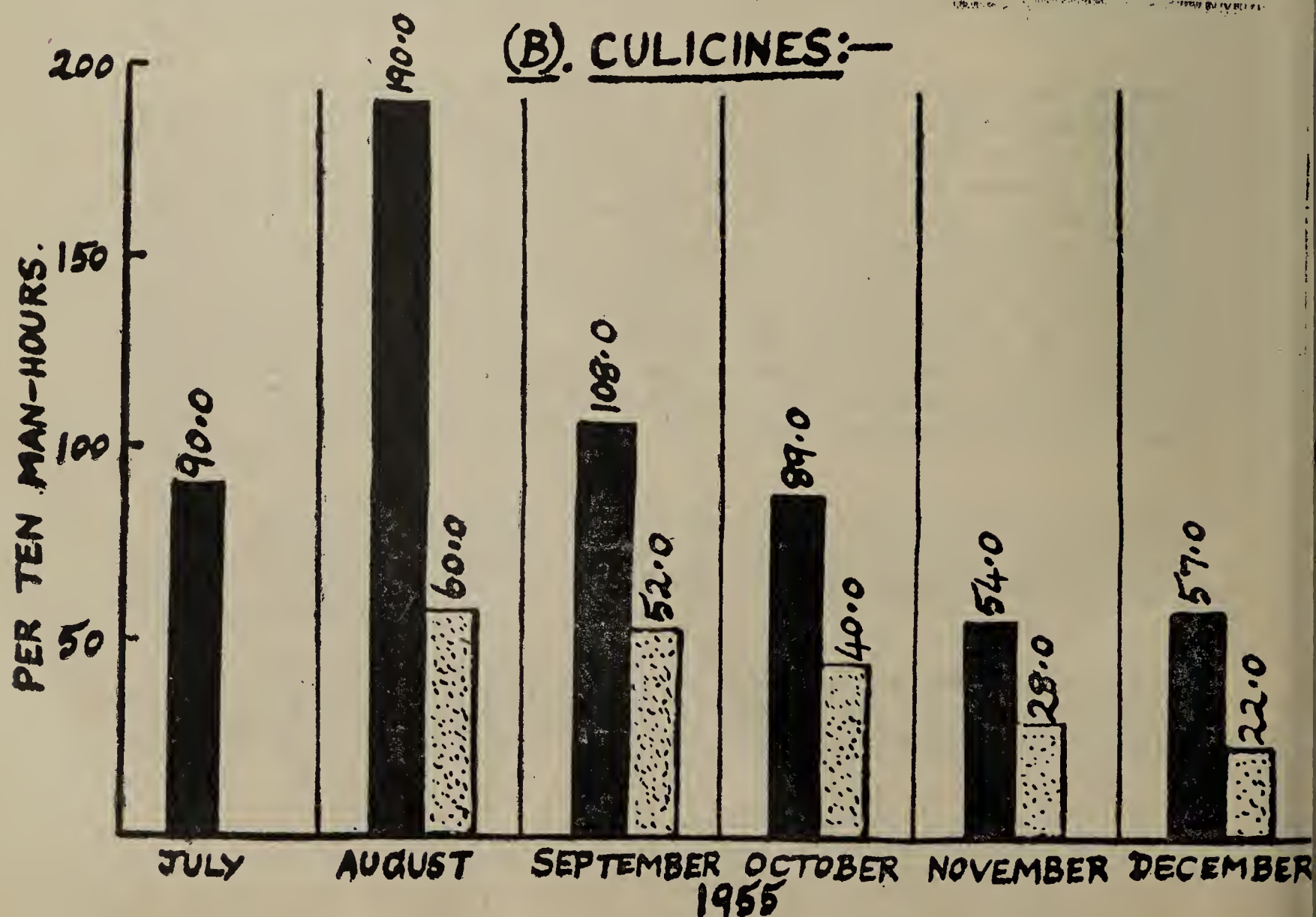


■ UNSPRAYED AREAS.

▤ DDT SPRAYED AREAS.

(NO COLLECTION WORK ORGANISED IN SPRAYED AREAS DURING JULY'55)

(B). CULICINES:—



With the advent of the National Malaria Control Programme activities, all the equipments and apparatus including the microscopes, were handed over to the Senior Entomologist to be in charge of the different works noted above since an Entomologist and a Laboratory technician were included in the scheme of National Malaria Control Programme.

The following formulations of D.D.T. were prepared at the laboratory for use in the field and for compliance with the request of the public for residual spray against adult mosquito nuisance as also against nuisance from other insects such as cockroaches, ticks, bugs, caterpillars and mits. The formulations were D.D.T. emulsion 5%; D.D.T. solution 10% or 5% according to requirements. The emulsion was used to destroy flies in the Corporation institutions and in infected houses. The quantity thus used was 400 gallons. The solution was used for residual spray against adult mosquitoes in private houses. The solution thus used during the year under report was 336 gallons

NATIONAL MALARIA CONTROL PROGRAMME

Introduction :—Under the National Malaria Control Programme for Urban areas one unit was allotted to the Madras State and included in the First Five Year Plan of the Government of India. The Government of Madras have included the following urban and panchayat areas to constitute one unit for urban malaria control to afford protection to about 1 million population under the scheme—1. Madras City 2. Salem 3. Erode 4. Tiruppur and 5. Namakkal Panchayat in Salem District.

Madras, one of the Metropolitan Cities of the Indian Union, has a population of over 16 lakhs (1955 mid-year population) and about 6 lakhs of its total population require protection against malaria. Accordingly out of the 1 unit allotted to the Madras State for Urban Malaria Control, 0.6 unit has been given to the Corporation of Madras and the remaining 0.4 unit distributed among the other four municipal towns and panchayats mentioned above. Out of the total assistance worth about Rs. 5.9 lakhs for the Urban Malaria Control Schemes, the Madras Corporation got Rs. 3.4 lakhs for the operational period of 2½ years in the shape of trucks, D.D.T., anti-malarial drugs, etc. This assistance comprising supplies of essential items and equipments for carrying out anti-adult work in malaria affected areas of the City is only to supplement the antilarval measures that are being carried out in the City for the past several years by the Corporation. The anti-adult measures by way of indoor D.D.T. residual spraying undertaken under the auspices of the National Malaria Control Programme are not general measure to deal with mosquito nuisance but are specifically intended to benefit such areas of the City as are either already malarial or exposed to the risk of malaria. Considering the Rs. 3.4 lakhs worth of assistance received by the Corporation, the extra expenditure on staff, maintenance charges of the two trucks etc., works out only Rs. 35,000/- (recurring per annum) and Rs. 26,000 (non-recurring per annum) Under the Indo-American Aid, only essential items and equipments are given by way of assistance while a laboratory, a museum and other items have to be provided by the local bodies concerned. It is proposed to have a well equipped laboratory and a museum for the Corporation and gradual progress has been made in this regard.

Staff :—The services of a Senior Entomologist have been loaned to the Corporation by the Madras State Public Health Department in connection with the implementation of the National Malaria Control Programme for the City.

The staff of the National Malaria Control Programme during the year was as follows :—

Senior Entomologist	...	One
*Malaria Supervisors	...	Two

(*Staff diverted from the General Malaria Section temporarily to work in the National Malaria Control Programme).

Typist	...	...	One
Attenders	...	...	Five
*Maistries	...	...	Four
Drivers	...	...	Two
Cleaner	...	...	One
*Peons	...	...	Two
Thozhilalies	...	...	Twenty-five.

(* Staff diverted from the General Malaria Section temporarily to work in the National Malaria Control Programme).

The post of a Laboratory Technician was not filled up and it was understood that a candidate would be deputed for training at the Central Malaria Laboratory, Director of Public Health Office, Madras, and appointed to the above post on completion of the requisite training. The staff of the scheme is temporarily accommodated in the Periamet Metal Yard buildings opposite to Ripon Buildings. Detailed proposals have been submitted for augmenting and increasing the strength of the staff as also for separate stores, accommodation, etc. These are dealt with in detail later.

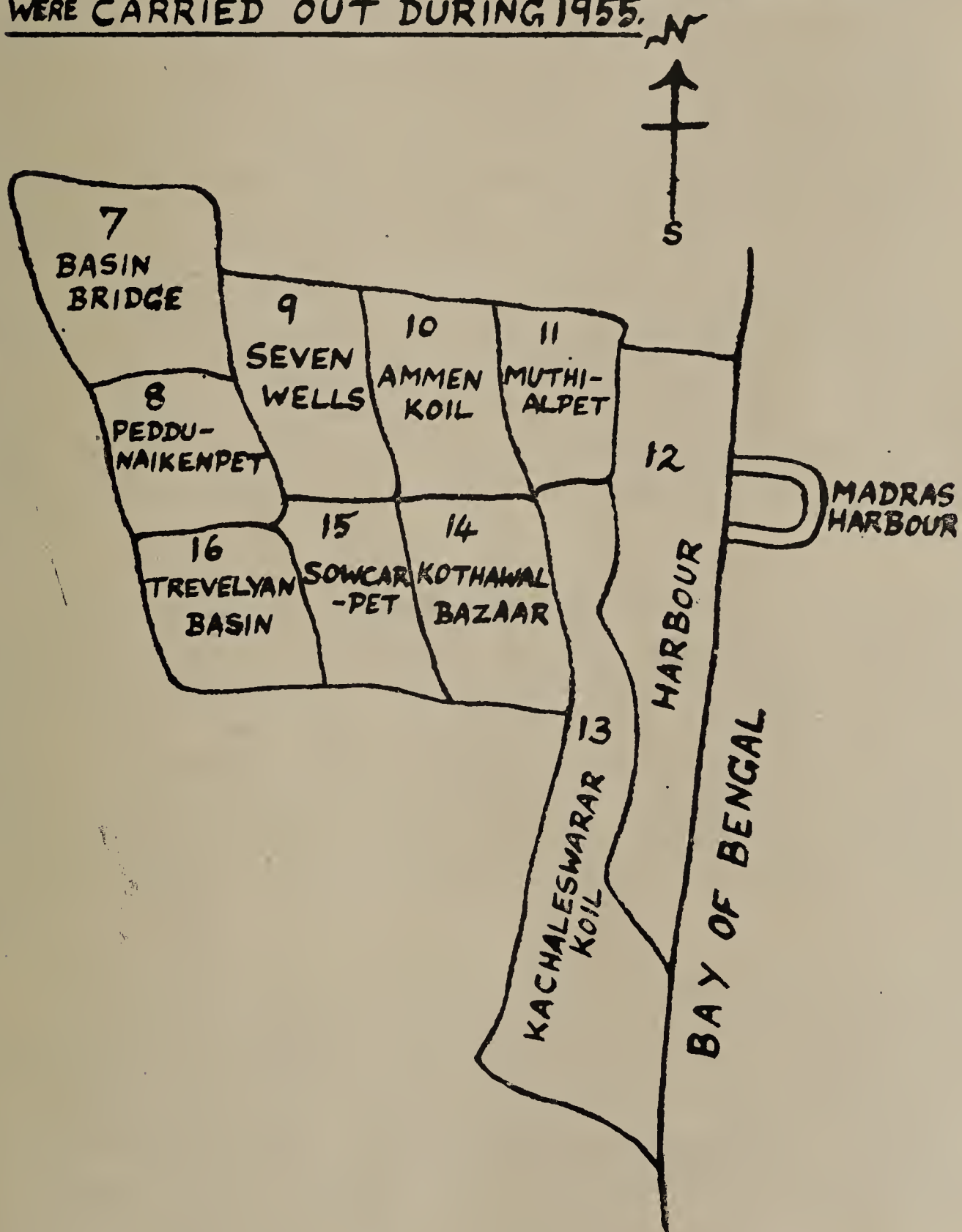
*Malaria in Madras City as per earlier Surveys:—*In the light of the earlier surveys carried out in some selected divisions of the City, particularly George Town area was malarious and the available malaria morbidity and mortality data also point out to the same. Some hold the view that the northern portions of the City are malarial because of its proximity to Ennore area which was once endemic for malaria but now under control. Anopheles culicifacies in the extreme northern parts of the City together with Anopheles stephensi, breeding commonly in wells, cisterns and other such situations are considered to be responsible for transmitting malaria in the City.

With the advent of D.D.T. as a powerful and potent insecticide, the collateral benefits incidental to controlling mosquitoes by D.D.T. spraying are many. It is effective against bedbugs, flies, sandflies and other household insect pests. In the City of Madras in addition to malaria control there are the problems of controlling Filariasis and Kala-azar and whenever these co-exist with malaria they will also be brought under control as incidental to D.D.T. spraying against mosquitoes.

*Inaguration of N.M.C.P., Corporation of Madras:—*On the 8th June 1955 the inaguration function of National Malaria Control Programme was held at the Corporation Stadium to give adequate publicity to the Citizens of Madras of the new scheme and on this occasion Sri M. A. Chidambaram, the Mayor of Madras, presided and Sri A. B. Shetty, Minister for Health, inagurated the scheme. It need hardly be emphasised here that D.D.T. spraying work is a very arduous task demanding strenuous work, meticulous supervision, team spirit and co-operation in full measure from the public, particularly in a big metropolis, like Madras.

Malaria Cross-Section Survey By N. M. C. P. Scheme: In pursuance of the decision arrived at a Joint Conference of the Director of Public Health, Assistant Director of Public Health (Malaria), Madras and the

GEORGE TOWN AREA (7 TO 16 DIVISIONS),
MADRAS CITY,
WHERE MALARIA SURVEY & DDT CONTROL
WERE CARRIED OUT DURING 1955.



Health Officer, Corporation of Madras, it was decided to take up, in the first instance, the George Town area of the City for malaria investigation and control works in view of the fact that this area was subject to periodical epidemic outbreaks of malaria and as greater incidence of malaria cases was reported from this area. After completing the investigation and D. D. T. spraying for malaria in the George Town area, it has been decided to extend the control measures to the other malarious divisions of the City based on the findings of the malaria survey.

Accordingly, the Senior Entomologist initiated the Cross-Section Malaria Survey in the George Town area commencing from the 7th division onwards, from the last week of May, 1955. The George Town area consists of 10 highly congested divisions (divisions 7 to 16) where many houses have wells which it is understood are either put to use sparingly or in complete disuse after the advent of the protected water supply from the Red Hills. These wells besides the cisterns and overhead tanks for water storage constitute ideal breeding grounds for *Anopheles stephensi*, the urban vector.

EPIDEMIOLOGY: (a) Splenomegaly:—The Cross-Section Malaria Survey included the representative examination of children of 1 to 15 years of age for enlargement of spleen, taking of blood smears from children for examination of malaria parasites and infant blood smear examination wherever possible. As far as the infant parasite survey is concerned, considerable difficulty was encountered and public co-operation was not forthcoming and blood only from infants whose parents did not object was taken and the data therefore collected regarding this aspect was meagre and not scientific.

Besides the above, entomological work relating to collection of adult mosquitoes and larval collection in wells in the sprayed and unsprayed areas was also being carried out by the National Malaria Control Programme staff. The malaria morbidity data received from the dispensaries and hospitals were collected and maintained in a register. Examination of blood smears from clinically diagnosed cases of malaria received from the dispensaries was also carried out and the data maintained in a separate register and the results furnished to the Medical Officer concerned.

The details of the Cross-Section Malaria Survey carried out for spleen rate, parasite rate and infant parasite rate in the 10 divisions of the George Town area are furnished division-wise hereunder in a tabular form. The Cross-Section Survey was completed in the George Town area during the third week of December, 1955. In consultation with the Director of Public Health, Madras and the Health Officer, Corporation of Madras other divisions will be taken up for malaria investigations.

Division No.	Name of Division	Spleen Rate Details								Parasite Rate Details						Infant parasite Rate Details Below 12 months			Remarks.	
		1 to 15 years age group				2 to 10 years agegroup				1 to 15 years age group			2 to 10 years group			No. of children examined	No. positive	Infant parasite rate percent		
		No. of children examined	No. positive	Spleen rate percentage	Average enlarged spleen	No of children examined	No. positive	Spleen rate percentage	A. E. S.	No. of blood smears	No. positive	Parasite rate percent	No. of blood smears	No. positive	Parasite rate percent					
7	Basin Bridge ...	539	80	15.0	1.5	393	67	17.0	1.4	298	15	5.0	11	5.5	Spleen rate high due to Kala spleens		
8	Peddunaickenpet	420	33	7.9	1.5	341	27	7.9	1.4	33	2	6.1	2	7.4	...	...	...
9	Seven Wells ...	595	50	8.4	1.5	522	44	8.4	1.5	111	8	7.2	7	6.9	...	...	...
10	Ammenkoil ...	456	49	10.7	1.4	404	43	10.6	1.4	139	6	4.3	6	4.7	16	...	...	
11	Muthialpet ...	571	59	10.3	1.6	527	51	9.7	1.5	158	10	6.3	9	7.3	11	1	9.1			
12	Harbour ...	512	53	10.4	1.4	434	42	9.7	1.5	110	6	5.5	5	5.2	19	...	...	
13	Kachaleeswarar ...	781	67	8.6	1.6	702	61	8.7	1.6	130	6	4.6	6	5.6	2	Only limited blood smears for want of Co-operation.		
14	Kothawal Bazaar	700	59	8.4	1.4	691	57	8.2	1.4	55	4	7.3	4	7.5	...	...	...
15	Sowcarpet ...	503	44	8.7	1.3	433	41	9.5	1.4	51	4	7.8	3	7.3	...	...	...
16	Trevelyan Basin...	631	41	6.5	1.4	595	38	6.4	1.3	118	5	4.2	5	4.7	...	...	...
Total ...		5,708	535	9.4	1.3	5,042	471	9.3	1.5	1,203	66	5.5	58	5.9	48	1	2.1			

From the data furnished above, it could be seen that the cumulative spleen rates for children of age groups 1 to 15 and 2 to 10 years work out to 9.4 percent and 9.3 percent respectively and the average enlarged spleen (A.E.S.) work out to 1.3 and 1.5 respectively. The spleen measurements in children examined were done as per Hackett's method and standing posture. The details of the spleen sizes met with in the 10 divisions surveyed are furnished below :—

Division No.	Name of Division	1 to 15 years age group						2 to 10 years age group					
		Spleen Size					Total	Spleen Size					Total
		1	2	3	4	5		1	2	3	4	5	
7	Basin Bridge ...	45	34	1	...	...	80	39	27	1	...	...	67
8	Peddu Naickenpet ...	18	15	...	...	...	33	15	12	...	...	...	27
9	Sevenwells ...	26	22	2	...	...	50	22	20	2	...	...	44
10	Ammenkoil ...	28	21	...	...	...	49	26	17	...	...	...	43
11	Muthialpet ...	29	28	1	1	...	59	25	25	1	...	...	51
12	Harbour ...	31	21	1	...	...	53	23	18	1	...	...	42
13	Kachaleeswarar.	33	30	4	...	...	67	30	27	4	...	...	61
14	Kothawal Bazaar	36	21	2	...	...	59	35	20	2	...	...	57
15	Sowcarpet ...	29	15	...	...	...	44	26	15	...	...	...	41
16	Treveleyen Basin..	28	11	2	...	...	41	27	9	2	...	...	38
Total ...		303	218	13	1	...	535	268	190	13	...	...	471

(B) *Parasite Survey* :—The cumulative parasite rates for children of age groups 1 to 15 and 2 to 10 years work out to 5.5 percent and 5.9 percent respectively. The species of Plasmodium encountered in the blood smears examined are furnished below :—

Division No.	Name of Division	1 to 15 years age group	Species			Remarks
		No. of blood smears positive	P. Vivax (B. T.)	P. Falciparum (M. T.)	P. Malariae (Q.)	
7	Basin Bridge ...	15	5	11	...	(1 mixed B.T. & M.T.)
8	Peddunaickenpet	2	1	2	...	(1 mixed B.T. & M.T.)
9	Seven Wells ...	8	5	5	...	(2 mixed B.T. & M.T.)
10	Ammenkoil ...	6	3	6	...	(3 mixed B.T. & M.T.)
11	Muthialpet ...	10	3	8	...	(1 mixed B.T. & M.T.)
12	Harbour ...	6	2	4	...	...
13	Kachaleeswarar ...	6	...	6	...	...
14	Kothawal Bazaar	4	1	3	...	...
15	Sowcarpet ...	4	1	4	...	(1 mixed B.T. & M.T.)
16	Trevelayan Basin	5	1	5	...	(1 mixed B.T. & M.T.)
	Total ...	66	22	54	...	(10 mixed B.T. & M.T.)

Division No.	Name of Division	2 to 10 years of age group	Species			Remarks
		No. of blood smears positive	P. Vivax (B. T.)	P. Falciparum (M. T.)	P. Malariae (Q.)	
7	Basin Bridge ...	11	5	7	...	(1 mixed B.T. & M.T.)
8	Peddunaickenpet	2	1	2	...	(1 mixed B.T. & M.T.)
9	Seven Wells ...	7	4	5	...	(2 mixed B.T. & M.T.)
10	Ammankoil ...	6	3	6	...	(3 mixed B.T. & M.T.)
11	Muthialpet ...	9	3	7	...	(1 mixed B.T. & M.T.)
12	Harbour ...	5	2	3	...	...
13	Kachaleeswarar ...	6	...	6	...	...
14	Kothawal Bazaar	4	1	3	...	...
15	Sowcarpet ...	3	1	3	...	(1 mixed B.T. & M.T.)
16	Treveleyen Basin..	5	1	5	...	(1 mixed B.T. & M.T.)
	Total ...	58	21	47	...	(10 mixed B.T. & M.T.)



A Boy with Spleen Enlargement

It will be seen from the above data that M. T. was found to be the predominating species of Plasmodium and next is B. T. in both 1 to 15 and 2 to 10 years age groups. No quartan parasites were encountered so far and 10 cases of mixed B. T. and M. T. infections were noticed.

The limited infant blood smears examined was 48 and out of this only one was found positive to M. T. infection and the Cumulative Infant Parasite rate works out to 2.1 percent.

The details of the examination of blood smears received from the various dispensaries of clinically diagnosed cases of malaria, are furnished hereunder monthwise from June, '55 to December, '55 :—

Month	No. of smears received from dispensaries	No. of positive.	Plasmodium Species			Remarks
			B.T.	M.T.	Q.	
June 1955	2	1	1	...	...
July „	11	3	2	1	...	
August „	17	4	2	4	...	(2 mixed B.T. & M.T.)
September „	17	5	...	5	...	
October „	14	3	2	2	...	(1 mixed B.T. & M.T.)
November „	5	...	...	...	...
December „	10	2	1	1	...	
Total ...	76	18	8	13	...	(3 mixed B.T. & M.T.)

It will also be seen from the above data that M. T. is the predominating species of the blood smears examined from the clinically diagnosed cases of malaria.

From the Splenomegaly and Parasite rates shown above, it could be seen that the Spleen rates range from 6.4 to 17 percent and the Parasite rates from 4.2 to 7.8 percent in the 10 divisions of the George Town area wherein the Cross-Section Malaria Survey was carried out and these figures are to be considered fairly high in an urban area.

*Entomological Aspects :—*Adult collection of mosquitoes was organised in the sprayed and unsprayed (contrast areas) and the details of the monthwise data of the same are given below in a tabular form. From the

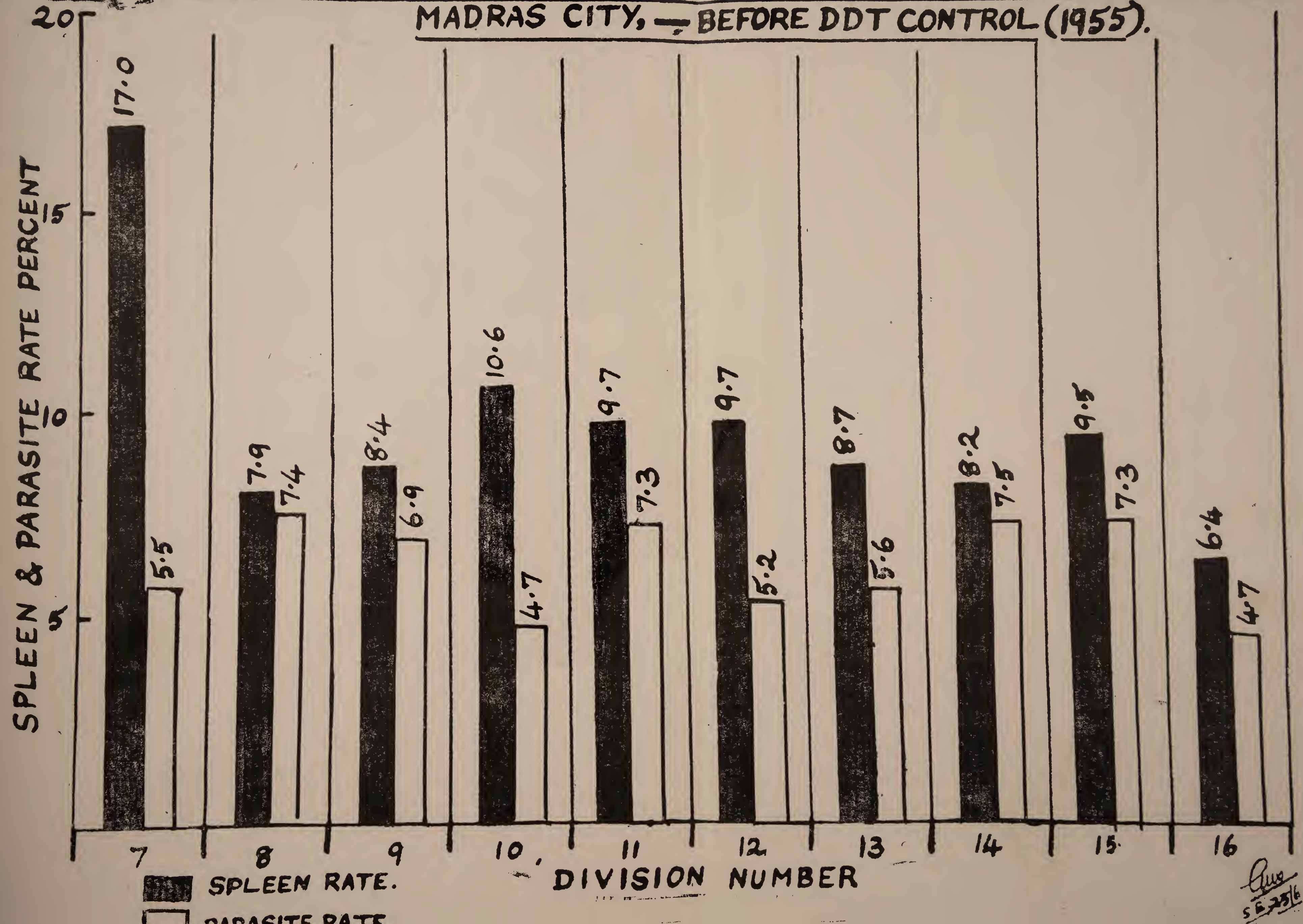
data it could be clearly seen that in the sprayed areas there is a perceptible reduction in the mosquito density as compared to the unsprayed or contrast areas.

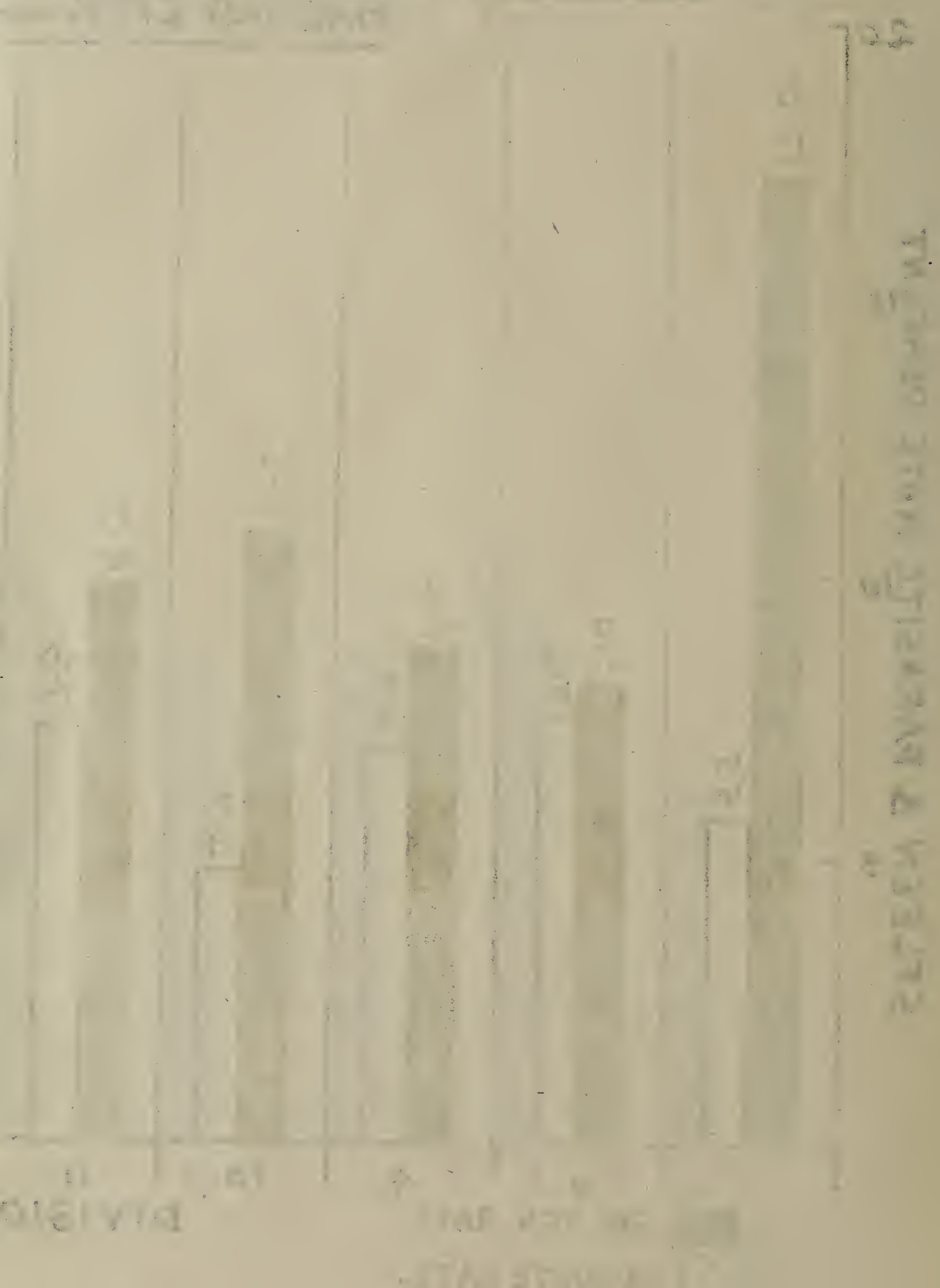
Month	Sprayed areas				Unsprayed areas			
	Anopheles		Culicines		Anopheles		Culicines	
	Male	Female	Male	Female	Male	Female	Male	Female
July 1955	Collection work not organised				67	161	115	568
August „	...	9	32	129	7	22	109	422
September „	1	11	97	311	1	40	222	574
October „	...	23	35	177	1	40	56	197
November „	10	76	18	136	37	133	94	214
December „	...	1	24	131	35	102	122	331
Total ...	11	120	206	884	148	498	718	2306

From July to December, '55, 287 hours and 20 minutes in the sprayed areas and 329 hours and 30 minutes in the unsprayed areas were spent in adult collection work as detailed below :—

Month	Time spent in hours and minutes			
	Sprayed areas		Unsprayed areas	
July 1955	Nil		68 hours	10 minutes
August „	28 hours	0 minutes	28 „	0 „
September „	78 „	30 „	73 „	30 „
October „	53 „	0 „	28 „	20 „
November „	56 „	0 „	57 „	0 „
December „	71 „	50 „	79 „	30 „
Total ...	287 „	20 „	329 „	30 „

SPLEEN & PARASITE RATES — GEORGE TOWN AREA (DIVISIONS 7 TO 16)
MADRAS CITY, — BEFORE DDT CONTROL (1955).





The Cumulative per man hour (P.M.H.) catch for *Anopheles* and *Culicines* in the sprayed and unsprayed areas from July to December, 1955 works out monthwise as follows :—

Month	Sprayed areas.					Unsprayed areas				
	Time spent in hours and minutes	Total <i>Anopheles</i>	P. M. H. Catch	Total <i>Culicines</i>	P. M. H. Catch	Time spent in hours and minutes	Total <i>Anopheles</i>	P. M. H. Catch	Total <i>Culicines</i>	P. M. H. Catch
July 1955	...	...	...	...	...	63-10	228	3.6	683	10.8
August „	28-0	9	0.3	161	6.0	28-0	29	1.0	531	19.0
September „	78-30	12	0.2	408	5.2	73-30	41	0.6	796	10.8
October „	53- 0	23	0.4	212	4.0	28-20	41	1.4	253	8.9
November „	56-0	86	1.5	154	2.8	57-0	170	3.0	308	5.4
December „	71-50	1	0.01	155	2.2	79-30	137	1.7	453	5.7
Total ...	287-20	131	0.5	1090	3.8	329-30	646	2.0	3024	9.2

From the above data it could be seen that there has been roughly over 60 percent cumulative reduction in the mosquito density, both of *Anopheles* and *Culex*, in the sprayed areas as compared to the unsprayed areas inspite of the fact that the adult collections in some sprayed areas were continued even beyond 3 months from the data of DDT spraying.

In the adult collections, the *Culicines* were predominating over the *Anopheles* of the total catches made. Of the *Anopheles*, the following species were encountered :—

1. *A. culicifacies*.
2. *A. hyrcanus*.
3. *A. subpictus*.
4. *A. vagus*.
5. *A. sub* or *vag*.
6. *A. stephensi*.

A. subpictus was the ubiquitous species met with among the *Anopheles*. Only one *A. stephensi* male mosquito was caught during July, 1955 in a human dwelling and two *A. culicifacies* female mosquitoes were caught during November, '55 one in a Human dwelling and another in a Cattle shed from the un-sprayed areas. On the whole it must be stated that the vector species of *Anopheles* viz., *A. stephensi* and *A. culicifacies* caught from July, '55 to December, '55 were very scanty in numbers and this may be attributable to the peculiar out-door resting habits particularly of *A. Stephensi* which has to be studied in greater detail to have a correct appraisal of the bionomics of this species and on which no substantial work has been hitherto carried out in South India. Also the anti-larval measures that are being carried out in wells, cisterns etc., by chemical and biological methods by the General Malaria Section of the Corporation of Madras may also be a contributing factor in the reduction in the density of *A. stephensi* mosquitoes in the above area.

Culex fatigans was the ubiquitous species among the *culicines* and next in order was *Culex cornutus*. Besides and above, some *Aedes aegypti* were also collected in the adult catches.

As regards larval breeding observations of *A. stephensi* in wells, cisterns and other such situations in the sprayed and unsprayed areas, the work was organised only recently and hence it is too early to make any useful discussion on this now.

Free Distribution of Anti-Parasitics:—During the Cross-Section Survey in the ten divisions of the George Town area, free distribution of Nivaquine tablets was made to malarial fever cases and to children with spleen enlargement indicating previous history of malarial attacks. Till the end of December, '55, 354 such cases were given the anti-parasitics and 793 tablets were distributed. Also a limited quantity of Resochin tablets has since been supplied under the Indo-American Aid for free distribution to malarial sufferers. This will be distributed after the Nivaquine stock is expended.

D. D. T. Control Operations:—D. D. T. indoor residual spraying in structures was instituted in the George Town area, commencing from the 7th division. The actual spraying operations were instituted from July 25th, '55 after the supervisory staff and the thozhilalies were given thorough training in the technique of D. D. T. spraying. 12 Myer's Little Giant Stirrup pumps with automatic jet agitating mechanism were purchased by the Corporation for starting the spraying operations. Ten pump sets were put into working, the remaining two being kept as reserves to be used in the place of any pumps breaking down and needing repairs.

75% D. D. T. water dispersible powder, received as free gift under Indo-American Aid, was used for spraying purposes and the ultimate spraying suspension was prepared to the strength of 5% and sprayed at the rate of 100 mgms per square foot as stipulated in the National Malaria Control Programme Operations Guide. As per the stipulations two rounds of spraying in a year at 100 mgms. per square foot will have to be carried out and at the time of writing this report the first round of spraying was in progress in the 13th division, divisions 7 to 12 having already been completed. After the first round is over in the George Town area, the second round will be started again from the 7th division. D. D. T. spraying is carried out in all the rooms of the houses, cattlesheds, etc., and the spraying is done on surface area of each structure so that a residue of D. D. T. is left on the walls, ceilings etc., that are sprayed. 1 gallon of 5% D. D. T. suspension is sprayed over 2,000 square feet. The supervisory staff of the National Malaria Control Programme give advance intimation to the householders explaining in detail the benefits of the spraying before any house or structure is taken up for spraying. D. D. T. spraying is not made as a compulsory measure but is solely left to the option of the inmates of the house. The supervisory staff mark on the doors or other prominent places of a structure as soon as the spraying is over a mark (D. D. T.—I. and Date) by white chalk indicating first round of D. D. T. spraying and the date on which the spraying was done. In case of houses which are locked, the following mark is made—L/date and in cases where people stoutly refuse to have the spraying the following marking is made—R/date. The details of the number of structures sprayed, locked and refused and the quantity of D. D. T. spent daily are noted in a field pocket note book by the Supervisory staff and these data are entered in the prescribed forms and checked and signed by the Malaria Supervisors daily. A register is also maintained by the Senior Entomologist for this purpose. The weekly data of the field staff are again totalled up and entries made in separate forms by the Malaria Supervisors and all these forms are kept in separate files. The above data, the Cross-Section Malaria Survey details, both epidemiological and entomological, are all finally tabulated and a monthly technical report in triplicate is sent to the Director of Public Health, Madras, who in turn after a perusal of the same forwards in duplicate the report to the Director, Malaria Institute of India, Delhi. Similarly the monthly log book extracts of the two National Malaria Control Programme trucks are also sent along with the monthly technical report showing the details of the daily trips done, their purpose and other such details.

Ever since the D. D. T. spraying was instituted on 25th, July, '55 and till the end of December '55 the details of the D. D. T. spraying carried out are furnished hereunder in a tabular form. The 1st round of spraying



Thozhilalies with Spraying Equipments Ready to go out for Work.

was completed in 7 to 13 divisions till the end of December '55 and the same will be continued in 14th division from 2nd January '56.

Division No.	Name with dates on which sprayed	No. of structures sprayed	Refused	Locked	Total No. refused and locked	Quantity of 75% D.D.T. powder expended
7	Basin Bridge ... (25-7-55 to 11-8-55)	2,440	52	197	249	1,468 lbs.
8	Peddunaickenpet (12-8-55 to 7-9-55)	1,436	71	46	117	2,630 „
9	Sevenwells ... (8-9-55 to 29-9-55)	1,655	220	86	306	2,280 „
10	Ammenkoil ... (30-9-55 to 21-10-55)	1,372	169	36	205	2,472 „
11	Muthialpet ... (21-10-55 to 22-11-55)	1,318	293	46	339	3,412 „
12	Harbour ... (23-11-55 to 10-12-55)	1,398	134	54	188	2,028 „
13	Kachaleeswarar ... (12-12-55 to 31-12-55)	1,121	167	121	288	2,472 „
Total ...		10,740	1106	586	1692	16,762 „

A perusal of the above D. D. T. spraying data will give a clear idea that of the 10,740 structures sprayed so far only a total of 1,692 fall under refused and locked category which works out to 15.8 per cent of the total structures sprayed. The above figures will indicate how the public are in favour of their houses being D. D. T. sprayed. The public have by now well realised the collateral benefits of D. D. T. spraying incidental to malaria control and many inmates have openly expressed the benefits of D. D. T. spraying and they themselves have started to do propaganda to their other friends and relations in the areas to have their houses D. D. T. sprayed. In the already sprayed areas, many citizens are eagerly awaiting the 2nd round of D. D. T. spraying.

*Field Trials with Dieldrin to be Organised:—*Under the Indo-American Aid, another powerful insecticide called “Dieldrin” has since been supplied in limited quantity for conducting field experiments in suitably selected areas in the City and the field trials will be taken up shortly. The field experimental trials is to be conducted in selected areas where Anopheles vector species are prevalent in fair numbers.

*Malaria Training Class for Attenders and Maistries:—*Since the Attenders and Maistries posted to work in the National Malaria Control Programme Scheme had no training in malariology, the Senior Entomologist with the approval of the Health Officer, Corporation of Madras is organising a course of training for one hour daily from 5th December, 1955 for the said staff. The course of training includes lectures and practical classes and this it with a view to make the field staff get fully acquainted with the various sechnical aspects of malaria work, particularly with reference to field work.

Proposals for Augmenting and Increasing the Staff of N. M. C. P. :—

The present sanctioned strength of the supervisory staff and thozhilalies for the National Malaria Control Programme work is not adequate and detailed proposals for augmenting and increasing the staff have been submitted to Health Officer and it is understood that necessary action is being taken in this regard. With increased staff as envisaged in the proposals submitted, it will be possible to complete two rounds of D. D. T. spraying in the George Town area within 8 to 9 months in a year and during the other remaining 3 to 4 months the D. D. T. spraying squads can be diverted to some other malarious divisions as per the findings of the Cross-Section Malaria Survey. With the increased supervisory staff and thozhilalies, it will be possible to put into operation 20 pump sets instead of the 10 pump sets working at the time of writing the report and thus accelerate the pace of work.

*Laboratory and Museum Accommodation :—*As for the laboratory and museum accommodation the Periamet Metal Yard buildings is quite unsuitable and separate detailed proposals in this regard have also been submitted to Health Officer for providing separate accommodation for the laboratory, museum etc., and for D. D. T. stores. It is understood that necessary action is being taken to have the old malaria laboratory at Trevelyan Basin remodelled suitably. Most of the equipments for the laboratory and exhibits for the museum have since been procured and the same will be put up and displayed when proper accommodation is made available.

*Distinguished Visitors :—*Before concluding this report on the working of the National Malaria Control Programme Scheme, it will not be out of place to mention about the distinguished visitors who visited the National Malaria Control Programme laboratory and evinced a keen interest in the various aspects of the work that was being done both in the laboratory and in the field.

Name of the Visitor.	Date of visit.
1. Dr. O. A. Jones, W. H. O., Lagos, Nigeria.	2nd September, '55.
2. Mr. Fred Knipe, Malaria Engineer, W. H. O., from Malaria Institute of India, Delhi.	15th September, '55.
3. Dr. N. Rajagopalan, Asst. Director of Public Health (Malaria)	7th October, '55.
4. Mr. J. C. Vedamanikkam, Chief Entomologist, Madras.	do
5. Mr. T. Parthasarathy, Malaria Engineer, Madras.	do
6. A batch of Health Officers and Senior Entomologists trainees.	do
7. Mr. Aaron Amramy, W. H. O., visiting Professor of Public Health Engineering for the College of Engineering Guindy.	10th November, '55.
8. Mr. N. R. Sithapathy, Professor of Public Health Engineering, Guindy, Madras, with post-graduate class students in Public Health Engineering.	10th November, '55.

*General :—*In conclusion, it must be stated that for a correct appraisal of the malaria control operations under the National Malaria Control Programme Scheme, the areas already sprayed will have to be surveyed again after the spraying is completed in George Town area and to record the epidemiological data during the post spray period.

REPORT OF THE PUBLIC ANALYST FOR THE CITY OF MADRAS FOR 1955

The number of samples analysed in the Public Analyst's Laboratory during the year 1955 was 5,518 as against 5,720 in 1954. Among these samples, 5,030 samples were analysed, in the earlier part of the year under the provisions of the Madras Prevention of Adulteration Act, 1918, and after 1st June 1955 under the provisions of the Central Prevention of Food Adulteration Act, 1954 as against 5,303 samples in 1954 under the Madras Prevention of Adulteration Act, 1918.

The Central Prevention of Food Adulteration Act was passed by both the Houses of Parliament in 1954 and received the assent of the President on 29th September 1954. On the enforcement of the new Act from 1st June 1955 all the State Acts which were in force previously got repealed under Section 25 of the said Act. The year under report is therefore unique in that it relates partly to the working of the Madras Act and partly to the working of the Central Act. The continuity of action against the sale of adulterated articles of food was ensured by clause 6 of the General Clauses Act of 1897.

Of the 5,030 samples analysed under the provisions of both the Acts said above, 2,983 samples were genuine and the remaining 2,047 samples were found to be adulterated. The percentage of adulterated samples for the year 1955 was 40·7 against 45·5 in 1954.

The samples consisted of milk, butter, ghee, gingelly oil, groundnut oil, cocoanut oil, coffee powder, tea, ghee substitutes, turmeric, arrow-root and other articles. A statement of the samples analysed in 1955 and in the five previous years is given in the appendix (Food-Analysis—Statement No. I.)—A graph showing the number of samples analysed and the number of samples found adulterated each year from 1931 is also appended to this report.

It would be seen from Statement No. I that the percentage of adulterated samples had been rising from 1950 onwards reaching the peak level of 54·8 per cent in 1952. Since then, due probably to the easing of the food situation, there has been a steady decrease in adulteration. The year under report has recorded a further decrease in adulteration.

The percentage of adulteration in 1955 was 40·7 as against 45·5 in 1954. Though it may be gratifying to note that the year 1955 has recorded the lowest figure for adulteration since 1950, still there is no room for complacency since the figure of 40·7 per cent is by no means low and the measures against food adulteration have to be continued as vigorously as possible until this social evil is completely eradicated.

As in the previous years, among the important articles of food, milk again recorded a high percentage of adulteration. It is well-known that milk is the most perfect of foods available to man and that it is an essential protective food for children. The importance of putting down adulteration of milk can not therefore be over-rated. An effective step in this direction is the removal of the innumerable itinerant small dealers from the trade and entrusting the entire supply of milk to the city, to Co-operative Milk Supply Societies, of which the individual cattle owners can become members. With such responsible milk supply societies, the control by the Corporation of the purity of the milk supplied to the City would be easier and more effective.

50·1 per cent of the milk samples were adulterated in 1955 against 56·1 in 1954. Though there has been a fall in the adulteration of milk during the year under report as compared with 1954, the percentage of adulterated samples still continues to be high in spite of the fact that more than 3,000 samples of milk are being taken annually. As pointed out in my previous reports as long as the price of milk is high and so long as the fines levied by the Magistrates are not sufficiently deterrent, the temptation to make easy profits by adulterating milk would continue.

During the year under report, an appreciable degree of adulteration has also been noticed in butter, ghee, gingelly oil, groundnut oil and coffee powder.

The percentage of adulteration of butter in 1955 was lower than that in 1954, the respective figures being 31.1 per cent and 36.1 per cent. The adulteration of ghee also showed a decrease during the year 1955, the percentage of adulteration in 1955 being 24.0 against 27.1 in the previous year. There has been an appreciable fall in the adulteration of gingelly oil during the year under report, the percentages of adulteration of this article in 1955 and in 1954 being 20.1 and 33.8 respectively. The adulteration of groundnut oil, which has uniformly been low showed, an increase during the year under report, the respective percentages of adulteration in 1955 and 1954 being 15.4 and 4.1. The adulteration of cocoanut oil in 1955 has remained practically the same as in 1954, the percentages of adulteration in 1955 and 1954 being 7.1 and 7.4 respectively. The adulteration of coffee powder showed a decrease during the year under report, the percentage of adulteration being 47.8 against 56.7 in 1954. Tea is the only article which has been continuously genuine for a number of years since 1933 and continued to be so in 1955 as well. In fact, during this period 1951 and 1954 were the only years in which adulteration of tea was noticed. The colouring of turmeric with lead chromate has shown a big increase during 1955 as evidenced by the fact that 22 samples out of 35 samples of turmeric contained lead in excess of the prescribed limit.

The analysis of samples of arrow-root was continued during the year under report. In commerce the term 'Arrow-root' includes a number of starches besides the genuine arrow-root (Starch of *Maranta arundinacea*) every substitute starch having a separate geographical prefix to the term 'Arrow-root'. Under the new Prevention of Food Adulteration Rules, 1955, Arrow-root is defined as the starch derived from the rhizomes of *Maranta arundinacea*. The labelling rules under the Madras Act are no longer in force. Substitute starches cannot be sold as 'Arrow-root' but they can be sold under their recognised commercial names or descriptions.

The details regarding the various articles of food analysed during the year under report are given below :—

Milk :—3,002 samples of milk were analysed. Of these, 1,094 samples were cow's milk, 1,550 were buffalo's milk, 298 samples were sold under the description of mixture of cow's and buffalo's milk, 57 samples were described as Milk without the qualification of cow's or buffalo's and 3 samples were described as Powder Milk.

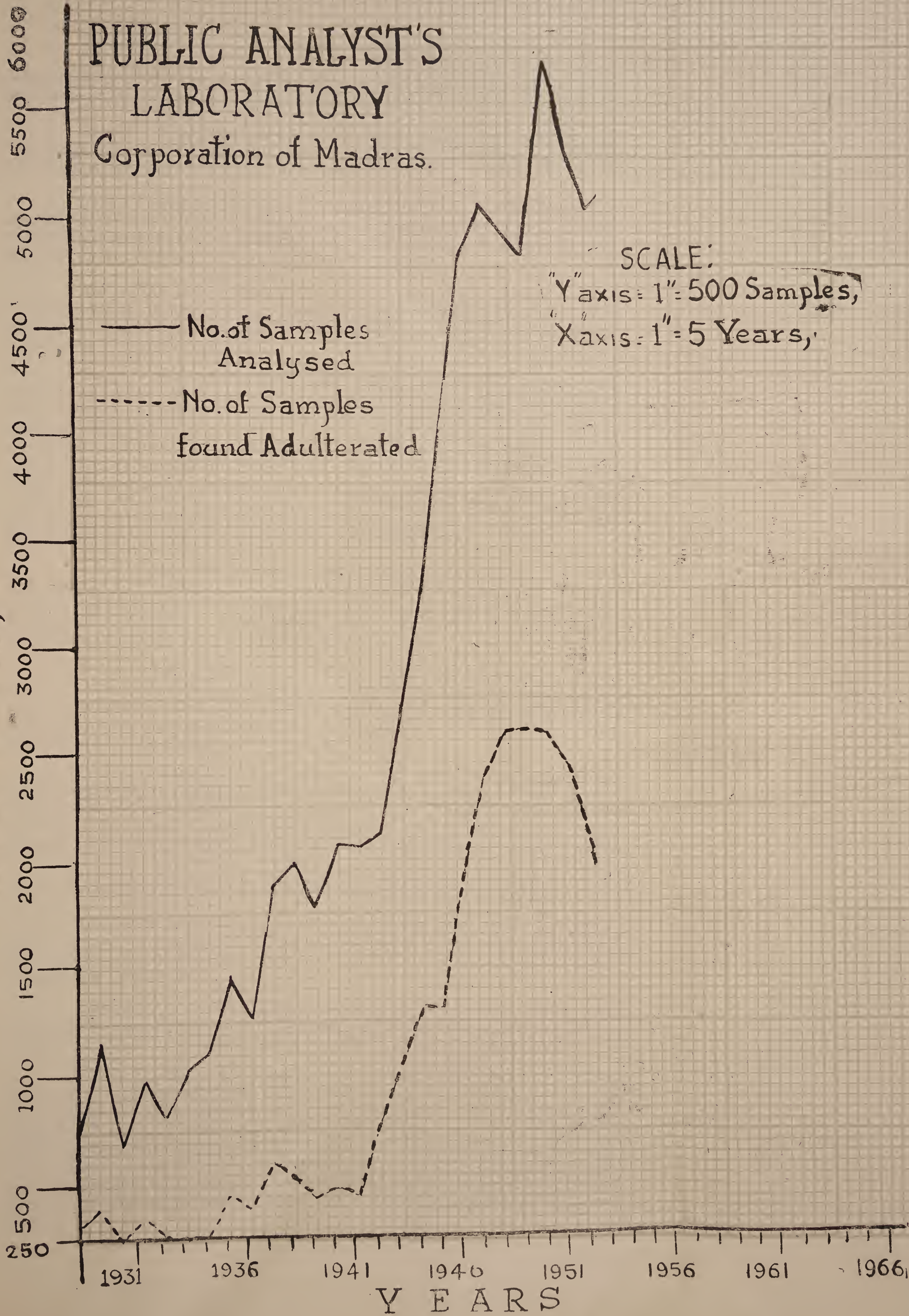
Of the 1,094 samples of cow's milk, 486 were genuine and 608 were adulterated. Among the adulterated samples, 508 contained added water ranging from 1 to 97 per cent. There was deficiency in fat in 43 samples to the extent of from 20 to 100 per cent and 57 samples were deficient in fat in addition to containing added water. The average values of fat and solids-not-fat for the 486 genuine samples of cow's milk were 4.5 per cent and 9.2 per cent respectively as against the average values of 4.7 per cent fat and 9.1 per cent solids-not-fat in 1954.

Of the 1,550 samples of buffalo's milk, 816 were genuine and 734 were adulterated. Among the adulterated samples, 625 contained added water ranging from 1 to 89 per cent, 56 samples were deficient in fat to the extent of from 16 to 98 per cent and 53 samples were deficient in fat besides containing added water. The average values of fat and solids-not-fat for 816 genuine samples of buffalo's milk were 6.5 and 9.7 per cent respectively as against the average values of 6.6 per cent fat and 9.8 per cent solids-not-fat in 1954.

Among the 298 samples of mixture of cow's and buffalo's milk 169 were genuine and 129 were adulterated. Among the adulterated samples, 119 contained added water ranging from 2 to 61 per cent, 2 samples were

PUBLIC ANALYST'S LABORATORY Corporation of Madras.

Number of Samples



deficient in fat to the extent of 23 and 79 per cent respectively and 8 samples were deficient in fat besides containing added water.

Of the 57 samples described as milk without any qualification, 28 were genuine and 29 were adulterated. The adulterated samples contained added water ranging from 3 to 30 per cent.

Of the 3 samples described as powder milk, which is the expression used by some local vendors to describe milk-reconstituted from milk powder, two were deficient in fat to the extent of 97 and 100 per cent respectively and one sample was deficient in both solids-not-fat and fat.

Among the 2,999 milk samples of the categories mentioned excluding 3 powder milks, 1,399 samples contained added water and the average content of added water in these 1,399 samples was 18 per cent as against 19 per cent during the year 1954.

Butter :—498 samples were analysed, of which 343 samples were genuine and 155 were adulterated. In 103 of the adulterated samples the water content ranged from 22.0 to 70.7 per cent, the prescribed maximum limit for water being 20 per cent under the provisions of the old Act and 16 per cent under the provisions of the new Act. 35 of these 103 adulterated samples also contained fat other than milk-fat besides containing excess water. The remaining 52 adulterated samples of butter had a water content within the prescribed maximum limit, but however contained foreign fat. The extent of adulteration with foreign fat among the 87 samples of butter which contained foreign fat ranged from 10 to 68 per cent.

The average water content of the 343 genuine samples of butter was 16.7 against 17.3 during 1954 and the average water content of the 103 samples which contained excess water was 46.7 as against 44.1 in 1954. Among the 87 samples of butter which contained foreign fat, the average percentage of foreign fat was 33 as against 34 in 1954.

It has to be mentioned that the adulteration of butter with foreign fat which was non-existent for nearly two decades has been very much on the increase during the years 1952, 1953, 1954 and 1955. Therefore the general impression among the public that they could get pure ghee by buying butter and melting it into ghee is now-a-days incorrect.

Ghee :—742 samples were analysed. Of these, 178 samples were adulterated with fat other than milk-fat, the common foreign fat used for the adulteration of these samples being Vanaspati (mostly hydrogenated groundnut oil). The extent of adulteration ranged from 9 to 100 per cent. The average admixture of foreign fat in the adulterated samples was 50 per cent.

Gingelly Oil :—343 samples were analysed, of which 69 were adulterated with groundnut oil to the extent of from 10 to 95 per cent.

Groundnut Oil :—13 samples were analysed, of which 2 samples were reported as adulterated. 1 sample contained 20 per cent cocoanut oil and 80 per cent Arachis (groundnut) oil and the other sample contained 100 per cent gingelly oil.

Cocoanut Oil :—154 samples were analysed and 10 of them were adulterated with groundnut oil to the extent of from 10 to 60 per cent and 1 sample contained 10 per cent gingelly oil and 90 per cent cocoanut oil.

Coffee Powder :—138 samples were analysed, of which 125 samples were sold as coffee powder and 13 as coffee and chicory mixtures. Of the 125 samples of coffee powder, 57 were adulterated. Of the adulterated samples, 15 samples were adulterated with Bengal gram, 2 samples with pea, 4 samples with date seed, 2 samples with chicory, one sample with spent coffee and one sample with Mahua flour and the remaining 32 samples were adulterated with preparations containing various proportions of more than one of the adulterants, Bengal gram, date seed, tamarind seed and chicory.

13 samples were sold as mixture of coffee and chicory. Of these, 9 samples were reported as adulterated. Six of them contained no chicory. These six samples contained pea, date seed or tamarind seed or more than one of these adulterants. Two of the adulterated samples contained more chicory than what was declared on the labels and the remaining one did not conform to the labelling regulations under the Act.

Tea :—23 samples were analysed and all of them were genuine.

Ghee Substitutes:—9 samples were analysed, of which 3 samples consisted of mixture of ghee and Vanaspati and the remaining 6 samples consisted entirely of Vanaspati of various brands and makes. The Vanaspati available in the market consists mostly of hydrogenated groundnut oil.

Other Articles :—There were 108 samples under this head. These consisted of 27 samples of thoovar dhal, 35 samples of turmeric, 42 samples of arrow-root, 3 samples of chicory and one sample of Bengal gram.

Out of the 27 samples of thoovar dhal, 4 were reported as adulterated as they contained a coal-tar colour, the addition of which is prohibited under the Madras Prevention of Adulteration Rules, 1932.

Of the 35 samples of turmeric, 22 were reported as adulterated as they contained lead ranging from 20 to 425 parts of lead per million parts of the sample (limit :—5 and 2.5 parts per million under the provisions of the old Act and new Act respectively.)

Out of the 42 samples of arrow-root, nine samples were genuine. These nine samples consisted entirely of Maranta starch (the starch derived from the rhizomes of *Maranta arundinacea*). Of the remaining 33 samples, 13 consisted of 100 per cent tapioca starch (starch of *Manihot utilisima*) and 20 samples consisted of 100 per cent Curcuma starch (starch of *Curcuma angustifolia*).

Of the 3 samples of chicory, two were genuine and one was adulterated and the adulterated sample contained 100 per cent date seed.

One sample of Bengalgram was analysed and it was genuine.

Besides the formal samples dealt with above which were taken under the State and Central Acts, 488 miscellaneous samples were examined in the laboratory during the year under report. Of these, 363 were samples of milk taken informally from the Madras Co-operative Milk Supply Union in order to check the purity of the milk before it was distributed to the City. These were in addition to the formal samples taken regularly from the sales depots and delivery boys of the Union, which are included among the formal samples dealt with in the earlier part of this report. Among the 488 miscellaneous samples are also included 7 samples of food from private parties analysed on payment of the prescribed fees.

A statement of the miscellaneous samples is given below :—

Nature of sample	Result of analysis
363 samples from the Madras Co-operative Milk Supply Union.	All genuine.
21 samples of Milk from the Health Department.	17 samples were genuine. 3 contained added water ranging from 7 to 38 per cent and one sample was deficient in fat besides containing added water.
18 samples of Skimmed Milk Powder from the Health Department.	6 samples were fit for consumption and 12 samples unfit for consumption.

Nature of sample.	Result of analysis.
3 samples of butter from the Health Department.	One sample was genuine, but unfit for human consumption and two contained excess water and fat other than milk-fat.
17 samples of Gingelly Oil from the Health Department.	All genuine.
2 samples of Curry powder from the Health Department.	Both genuine.
11 samples of Coffee Powder from the Health Department.	All genuine.
2 samples of Bread from the Health Department.	Excessive acidity and therefore unsuitable for invalid diet.
2 samples of Ghee from the Health Department.	One genuine and the other adulterated with fat other than milk-fat.
6 samples of Butter Oil from the Health Department.	2 samples were fit for human consumption and 4 samples were unfit for human consumption.
2 samples of Cotton Seed Oil from the Health Department.	Fit for consumption.
14 samples of Potatoes (on suspicion of contamination with D.D.T.)	No D.D.T. was found in any sample.
17 samples of Transformer Oil from the Electrical Department.	Reports on the inorganic and organic acidities were made.
2 samples of Maida flour from the Health Department.	Both genuine.
1 sample of Toned Milk from the Health Department.	Genuine.

The remaining 7 samples were analysed on payment of fees for private parties and these consisted of one sample of milk, 1 sample of ghee, two samples of gingelly oil, 2 samples of thoor dhal and 1 sample of arrow-root. The amount of fees collected during the year under report was Rs. 45.

A tabular statement on the action taken on the adulterated samples of 1955 and those of 1954 pending disposal on 1st January 1955 is given in the appendix (Food Analysis Statement No. II).

The number of samples reported as adulterated during the year under report was 2,047. Action taken in respect of these samples is given below :—

Warning of Vendors	...	84 cases
Prosecution of Vendors	...	1,963 „
Total	...	<u>2,047 „</u>

Of the 1,963 prosecutions instituted, convictions were obtained in 1,168 cases. There were 4 acquittals and the remaining 794 cases were pending disposal on 31st December 1955. 564 convictions were obtained among the cases relating to the period prior to 1st January 1955.

The total number of convictions for the sale of adulterated articles of food in 1955 was 1,732 as against 1,965 in 1954. The amount of fines imposed in 1955 was Rs. 61,839 against Rs. 38,544 in 1954. The average

fine per conviction in 1955 was Rs. 36 against Rs. 20 in 1954. The maximum and the minimum fines imposed in the year 1955 were Rs. 250 and Rs. 5 respectively.

In one case the vendor was convicted and a sentence of one month R. I. was awarded in addition to a fine Rs. 100.

The following persons continued as my assistants during year under report :

1. Sri S. Sundaram, M. A.
2. Sri R. Ramalingam, M. Sc.
3. Sri V. V. Ramana Rao, M. Sc.
4. Sri C. Rajaganapathi, B. Sc.

I had been pointing out in successive annual reports the need for deterrent fines to put down adulteration effectively. All these years, the fines continued to be low and adulteration remained unabated. It is gratifying to note that the Parliament has prescribed both heavy fines and imprisonment in the Central Prevention of Food Adulteration Act, 1954. Imprisonment has also been prescribed for first offences as an alternative or additional optional punishment and for subsequent offences imprisonment has been prescribed as a compulsory punishment in addition to heavy fine. This has caused a stir among the food merchants. At the time of writing this report imprisonment has been imposed in addition to fines in some cases and this has had a very salutary effect. Particularly in the case of butter and ghee, the fall in adulteration has been considerable.

It is to be hoped that the fear of deterrent fines and imprisonment would eliminate the adulterators from the food trade and that the improvement noticed in the case of butter and ghee would extend in due course to other important articles of food, namely, milk, edible oils, etc. There is now a glimmer of hope that the social evil of food adulteration which has persisted so long would be completely eradicated in the near future resulting in improved health and increased well-being of the public.

V. VENKATACHALAM, M.A., A.R.I.C.,
Public Analyst

REPORT OF THE WATER ANALYST FOR 1955

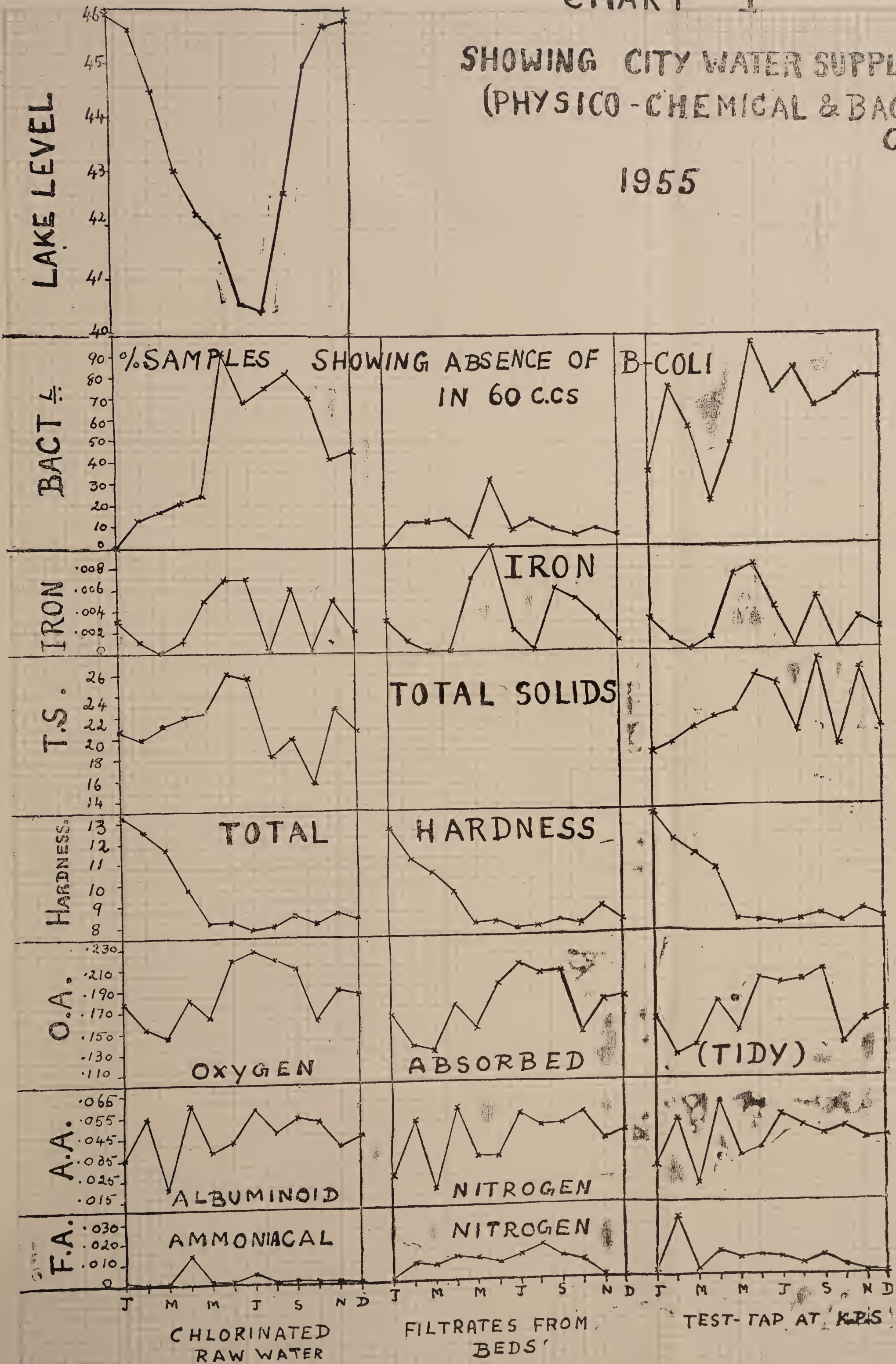
Introduction:—The laying of the foundation stone for the “Rapid Gravity Mechanical Filters” on 14-11-55 by Dr. Rajendra Prasad, President of India, marked the beginning of a noteworthy change for the better in the Corporation Water Works practice. The significant aspects of the scheme are chemical treatment, flocculation and mechanical filtration. The role of the works-chemist will become vital in the technical set up of the water works with the installation of the mechanical filters.

The results of water analysis during the year under report did not vary markedly from those of the previous year. The dose of chlorine added to the filtered water ranged between 1.29 and 2.00 p.p.m. which was nearly double that applied to the raw water. The raw water after passing through the sand filters (each containing about 6" of fine sand) deteriorated chemically to a slight extent and bacteriologically to a very large extent. Considerable amounts of H_2S were produced in the beds. The distributed water was far from satisfactory bacteriologically. It was more so in the low pressure areas where the percentage of 1st class samples ranged between 0 and 50. Smell of H_2S in the distribution system was still prevalent during the hotter months, even though sterilisation of the water mains and more frequent scouring of the mains had brought down the smell to an appreciable extent during the year under review.

CHART I

SHOWING CITY WATER SUPPLY: HEAD WORKS
(PHYSICO-CHEMICAL & BACTERIOLOGICAL
CONDITIONS)

1955



Scientific:—Water for the city is drawn from three main systems:—
(A) The Kortalayar river system, (B) the infiltration gallery wells at Saidapet and Sembiam and (C) the shallow wells at Adyar, Kodambakkam and Saidapet. The changes in the physical, chemical and bacteriological conditions of the water in each of these three systems during the year are briefly given below.

(A) *The Kortalayar River System*:—The river Kortalayar is dammed at Poondi 32 miles away from the city and Satyamoorthi Sagar has been formed for storing the greater flood discharges. The stored water is let down through the river bed and another channel (called the upper supply channel) into the Sholavaram Reservoir and from the latter water is let down through the lower supply channel into the Red Hills Reservoir, which served as the chief source of raw water supply to the Water Works at Kilpauk. The three sources were visited almost once a month during the year for collection of samples and the results of their examination are shown in the Water Analysis Statements Nos. III, IV and V.

(a) *The sources of raw water supply*:—The Satyamoorthi Sagar (Statement No. III):—The total yearly rainfall at Poondi was 48.27" as against 40.85" last year. The highest rainfall of 8.41" was recorded in November. There was practically no rainfall in March. The average reservoir level varied from a minimum of 132.53' in July to a maximum of 137.32' in December.

Water Analysis Statement No. III The water was slightly yellowish in February, August and November and slightly greenish in March and May. The temperature of water varied from 27.5°C. to 34.0°C.

Chemically, the figure for total solids varied from a minimum of 20.0 parts in October to a maximum of 38.8 parts per 100,000 in May; P.H. from a minimum of 8.1 in May to a maximum of 8.8 in February; dissolved oxygen from a minimum of 3.85 c.c/L in August to a maximum of 5.7 c.c/L in May; Tidy's organic matter from a minimum of 0.089 in March to a maximum of 0.355 p.p.h.t in July; Albuminoid Nitrogen from a minimum of 0.008 in March and October to a maximum of 0.060 in May and September; and the total hardness varied from a minimum of 6.0 in May and July to a maximum of 9.8 parts per 100,000 in October. Nitrites were found in minute traces and nitrates were absent. Phosphates were found to vary from 0.001 to 0.002 p.p.ht. and silicates between 0.1 and 0.4 p.p.ht.

Coliform organisms were present in 1.0 c.c. and upwards for the major part of the year.

2. *The Sholavaram Reservoir (Water Analysis Statement No. IV)*:—The total rainfall recorded in the catchment area of this reservoir was 46.39" as against 40.14" in the preceding year. The maximum level of 62.07' was recorded in February. The monthly average water level varied from a minimum of 57.16' in September to a maximum of 62.07' in February. There was practically no rainfall in March.

The water was colourless in October and slightly yellowish or slightly greenish during the rest of the year. The temperature of the water varied from a minimum of 28.5°C in November to a maximum of 32.0°C in May.

Chemically, the values of the total solids varied from a minimum of 19.6 parts in November to a maximum of 27.6 parts per 100,000 in July. P.H. varied from a minimum of 7.9 in May to a maximum of 8.5 in October and November; dissolved oxygen from a minimum of 5.5 c.c/L in July to a maximum of 7.61 c.c/L in November; chlorides from 4.0 to 5.2 p.p.ht; Tidy's organic matter from 0.181 in February to 0.288 p.p.ht. in July and albuminoid nitrogen from 0.010 in October to 0.060 p.p.ht. in May and July; Nitrites were found in minute traces and nitrates were generally

absent. Phosphates were found in traces in all the months. Silicates varied from 0.1 to 0.4 p.p.h.t. and the total hardness from 7.4 to 12.0 p.p.ht.

Coliform organisms were present in volumes varying from 1.0 c.c. to 20.0 c.c. and upwards.

3. *The Red Hills Reservoir (Water Analysis Statement No. V):*—The total annual rainfall in the catchment area of this reservoir was 38.29" as against 41.97" in the previous year. A maximum rainfall of 8.14" was recorded in November. There was no rain in March. The monthly average, water level varied from a minimum of 40.40' in August to a maximum of 45.87 in January.

The colour of the water was slightly yellowish during the major part of the year and slightly greenish during a few months.

Chemically, the total solids varied from a minimum of 14.8 parts in October to a maximum of 36.0 p.p.ht. in May; P.H. varied from 7.8 in May to 8.4 during the other months; dissolved oxygen from a minimum of 4.6 c.c./L in May to a maximum of 6.22 c.c./L in November, chlorides varied from 3.1 parts to 5.0 p.p.h.t. Tidy's organic matter varied between 0.185 parts and 0.288 p.p.ht.; Albuminoid nitrogen between 0.016 parts and 0.080 p.p.ht. Nitrites were generally present in minute traces. Nitrates were generally absent. Phosphates were found in traces. Iron varied between nil and 0.01 p.p.ht. and the total hardness varied from a minimum of 7.4 parts in August to a maximum of 9.4 p.p.ht. in November.

Coliform organisms were found in volumes varying from 1.0 c. c. to 60 c. c. and upwards.

(b) *Chlorinated raw water at the Kilpauk end (Water Analysis Statement No. VII):*—The range of variations of some of the important results is given below:

	Parts per 100,000
P.H.	... 8.3 to 8.4
Chlorides	... 3.2 to 5.3
Total hardness	... 7.9 to 13.3
Organic matter :	
(a) Oxygen absorbed (Tidy)	... 0.147 to 0.227
(b) Albuminoid nitrogen	... 0.021 to 0.060
Iron	... nil to 0.007
Average dose of chlorine (p.p.m.)	... 0.52 to 1.27

The percentage of samples showing absence of B.Coli in 60 c.c. varied from 0 to 92 indicating that the process of chlorination was not uniformly efficient.

(c) *Sand filters and filtration (Water Analysis Statement No. VIII.):*—The monthly averages of the results of analysis for some of the important tests are given below :—

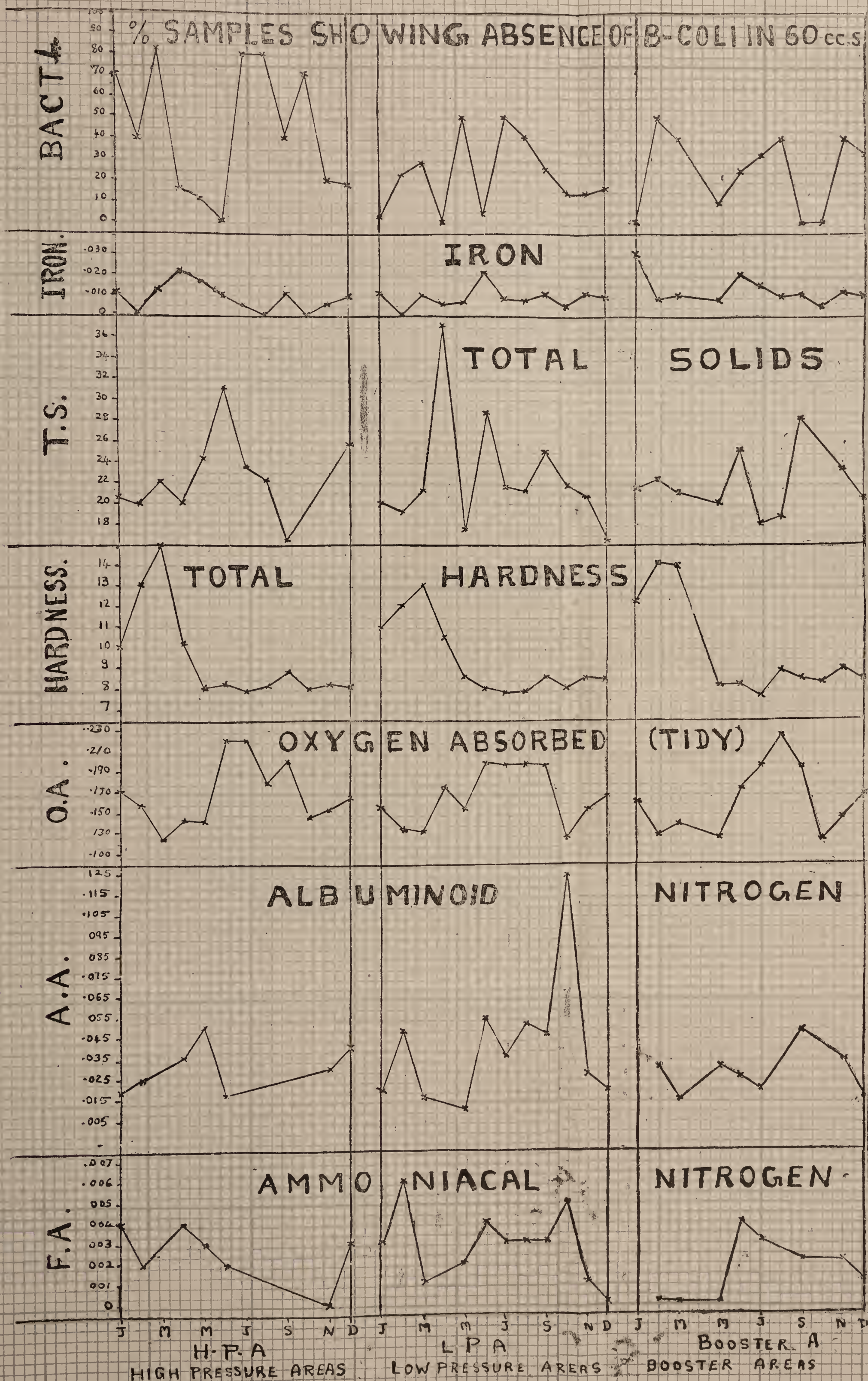
	Yearly range
Ammoniacal nitrogen	... 0.001 to 0.016 parts per 100,000.
Albuminoid „	... 0.019 to 0.057 „
Oxygen absorbed (Tidy's)	... 0.130 to 0.211 „
Total hardness	... 7.8 to 12.6 „
Iron	... M.tr. to 0.010 „
Dose of chlorine (p.p m.)	... 1.05 to 2.27
% samples showing absence of B. Coli in 60 c. c.	... 0 to 32.

CHART II

MADRAS CITY WATER SUPPLY: DISTRIBUTION SYSTEM

(PHYSICO-CHEMICAL & BACTERIOLOGICAL ASPECTS)

1955



Inspite of the application of a fairly high dose of chlorine to the raw water feeding the sand filters, samples of the filtrates from the individual beds were of poor bacteriological quality.

(d) *Test tap (Water Analysis Statement No. IX) :—*

	Yearly range parts per 100,000
Ammoniacal nitrogen	... 0.001 to 0.028
Albuminoid	... 0.019 to 0.058
Oxygen absorbed (Tidy)	... 0.122 to 0.203
Iron	... nil to 0.008
% samples showing absence of B. Coli in 60 c.c. volumes	... 21 to 96

The bacteriological quality of the test tap water was not uniformly good.

Statement No. X contains the chlorination data.

(e) *Distribution system (Statements Nos. XI and XII):—*

	H. P. areas	L. P. areas	Booster areas
Ammoniacal nitrogen	nil to 0.004	trace to 0.006	nil to 0.004
Albuminoid	0.017 to 0.051	0.010 to 0.054	0.014 to 0.048
Oxygen absorbed (Tidy)	0.124 to 0.220	0.124 to 0.199	0.123 to 0.224
Total hardness	7.9 to 15.0	7.8 to 13.0	7.7 to 14.1
Iron	M.tr to 0.021	0.002 to 0.022	0.005 to 0.030
%samples showing absence of B.Coli in 60 c.c.	0 to 83	0 to 50	0 to 50

The bacteriological quality of the water undergoes marked deterioration during transit from head works to the distribution system.

(B) *The infiltration gallery wells at Sembiam and Saidapet (Water Analysis Statements Nos. XIII and XIV) :*

	Yearly range parts per 100,000	
	Sembiam	Saidapet
Ammoniacal nitrogen	nil to 0.018	nil to 0.010
Albuminoid	nil to 0.008	nil to 0.032
Oxygen absorbed (tidy)	0.020 to 0.122	0.015 to 0.112
P.H.	7.2 to 7.9	6.8 to 7.8
Total hardness	18.0 to 38.0	15.0 to 28.0
Total solids	38.6 to 58.0	23.0 to 69.2
Iron	0.009 to 0.037	nil to 0.025

Statement No. XIV relating to water analysis in the appendix reveals that the bacteriological quality of the water drawn from the distribution systems in Sembiam and Saidapet was generally good.

(C) *The shallow wells used as sources of water supply in the outlying areas of the city (Water Analysis Statement No. XV) .*

The water from the well in Richard's Park, Saidapet, was chlorinated and used for supplying public fountains in Guindy. The water from the two wells located at Urur in Adyar were pumped into the reservoir at Mandavalli, Mylapore, for supplying the new Gandhinagar colony and other places at Adyar. The water from the shallow well which is located in the United India Colony at Kodambakkam was used for supplying public fountains in that area.

The water from the two wells at Saidapet and Kodambakkam was totally unfit for drinking purposes.

(D) Sterilisation of water mains for the removal of growths and deposits in the City distributory system (Statement No. XVI) :

1. Total No. of days when the
mains were sterilised ... 246.
2. Quantity of chlorine used... 3,526 lbs.
3. Length of mains treated ... 6 miles and 3 furlongs.
4. Details of mains treated

(a) Main No.	No. 3	No. 7
(b) Length	3 miles and 4 furlongs	2 miles and 5 furlongs.
(c) Days	96	137
(d) Chlorine	1,606 lbs.	1,774 lbs.
5. No. of samples examined 370
 - (a) No. taken before sterilisation 185
 - (b) No. taken after „ 185
6. Effects of injection of chlorine on the distributory system are shown in Statement No. XVI of water analysis in the appendix.

(a) Brownish, flocculent, soft pipe growths and deposits were dislodged from the sterilised portion of the main when scoured. These deposits consisted essentially of ferric oxide, organic matter and iron bacteria.

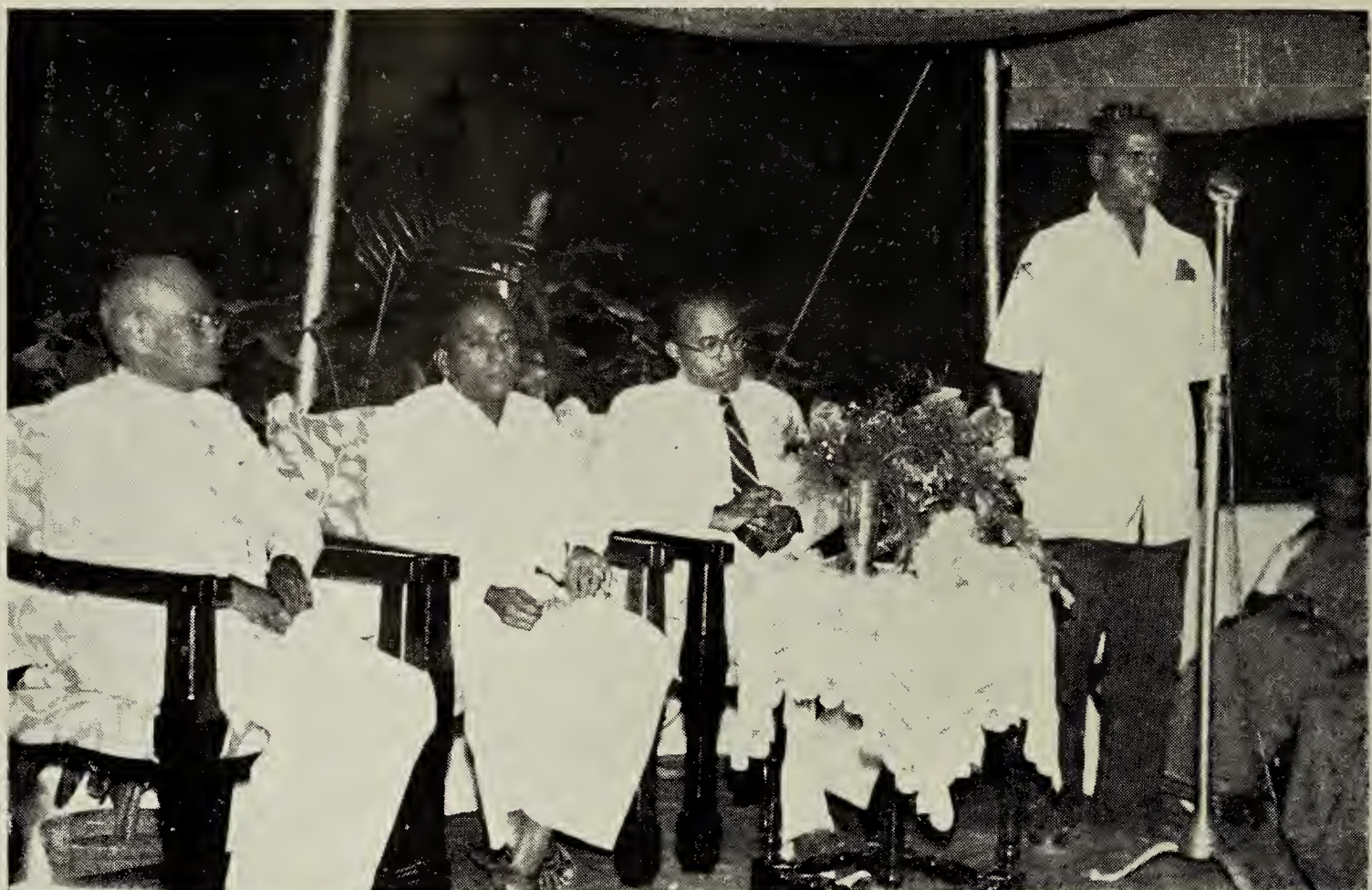
(b) An increase in the iron content immediately after sterilisation and a reduction thereafter.

From the foregoing it will be seen that there is no doubt about the beneficial effect of the injected chlorine on the water mains. The incrustations in the pipe lines are several decades old and only repeated treatment can bring about the removal of the incrustations to an appreciable extent.

(E) A sum of rupees 540 was realised by way of fees for analysis of private samples.

*Staff:—*Sri S. V. Ganapati, M. Sc., A. R. I. C., retired as Water Analyst on 4-9-55 and was succeeded by Sri V. Kripakaran, B. Sc. On the appointment of Sri V. Kripakaran to the post of Assistant Chemist, Geological Survey of India, I assumed charge as Water Analyst on 5-1-1956. Sri S. V. Ganapati has been appointed as Honorary Advisor to the Water Analyst's Laboratory. Sri S. Nagarajan, B. Sc. and Sri C. N. Muruganathan, B. Sc., the two new assistants, were appointed during the course of the year under report.

G. DEVADOSS
B.SC., B.SC. (TECH.)
Water Analyst



Opening of a Maternity Centre at Ayanavaram on 22-10-55 by Sri M. A. Chidambaram, Mayor of Madras



Opening of a Maternity Home with 50 beds at Ashok Vihar by Hon'ble Sri A. P. Shetty, Minister for Health, Government of Madras on 19-3-56

REPORT ON CHILD WELFARE SCHEME FOR 1955.

There were 34 child welfare centres at the beginning of the year. Three new child welfare centres were opened in divisions 24, 27 and 48 and the sub-centre at Ayanavaram was converted into a maternity home with 50 beds, thus bringing the total to 37 child welfare centres at the end of the year. In 17 of these centres, wards was attached, the total bed strength being 234.

A statement showing the no. of child welfare centres opened during the last five years is given below.

Year	No. of centres at the beginning	No. of centres opened	Total No. of child welfare cen- tres at the end
1951	30	nil	30
1952	30	nil	30
1953	30	nil	30
1954	30	4	34
1955	34	3	37

Serological examination of blood of ante-natal cases: In 10 of the child welfare centres serological examination of blood was being conducted. For all the positive cases treatment with pencillin supplied by *Unicef* was given free of cost. A statement showing the No. of blood samples examined, no. of positive cases that took full course of treatment and partial treatment during the year is furnished below.

Total No. of samples examined	Total No. of positive cases.	Total No. of postive cases that took full course of treatment.	No. of positive cases that took partial treatment.	No. of positive cases that did not turn up inspite of persuasion by staff.
14,958	900	345	223	332

The department is making efforts to introduce blood testing in all the child welfare centres.

Creches:—Three creches were maintained by the Corporation at Broadway, Royapuram and Chetput. They are intended for the benefit of working class parents whose combined income is Rs. 50 or below per mensem. The working mothers leave their children at these creches before they go out for work in the mornings and take them back in the evenings. During their stay at the creches, the children are given bath, fresh and clean clothing, nourishing food and adequate rest. They are allowed to play games both in-door and out-door and then they attend nursery classes. Action songs, story telling and prayer are part of the programme at these nursery classes. All minor ailments of the children are attended to then and there by the Assistant Surgeon in charge. The average daily attendance of children at Royapuram, Broadway and Chetput Creches was 21, 32 and 19 respectively.

Staff:—Captain (Kumari) C. N. Rukmini, M.B.B.S., Lady Superintendent, Child Welfare Scheme was in charge of the Scheme during the year. She was on leave from 4-4-55 to 13-5-55 when Dr. (Srimathi) V. S. Krishnaswamy, M.B.B.S., DM. C.W. (Cal.) C. P. H. (Lond.), Assistant Surgeon, Child Welfare Scheme, acted as the Superintendent.

There were 31 Assistant Surgeons including 2 relieving Assistant Surgeons, 44 qualified Health Visitors, 8 General Trained Nurses, 231 Midwives and 27 Compounders during the year under report.

Pre-Natal Clinics :—The pre-natal work conducted by the Assistant Surgeons thrice a week regularly in each centre, forms an important link between the expectant mothers and Child Welfare Scheme. The expectant mothers are medically checked up thoroughly on their first visit and thereafter re-examined once a fortnight or a week as the individual case required. 41,614 expectant mothers attended the clinics and were given medical advice and treatment by the Assistant Surgeons against 39,991 in the previous year. An appreciable number of mothers was benefited by the guidance, advice and treatment given at the centres.

Maternity Service :—The total number of births in the City during the year was 66,449. The number of labour cases that came under the care and observation of the Scheme was 32,285 as against 29,209 in the previous year. 16,088 births were conducted in the Corporation maternity wards during the year, the figure for the previous year being 14,405. The number of house visits made by the midwives was 2,35,980, by the Health Visitors was 1,97,615 and by the Assistant Surgeons was 19,238 during the year. Among the births that came under the care of the Child Welfare Scheme, there were 252 twins and 716 still births.

Maternal Mortality :—Out of the 32,285 labour cases conducted during the year there were 45 cases of maternal mortality as shown below (the figures for 1954 being 29,209 and 37 respectively.)

Name of Institution	Deaths in	
	1955	1954
Child Welfare Scheme	6	nil
Hospitals	35	35
Private Doctors	3	1
Vaidians	1	1
	<hr/> 45	<hr/> 37

The maternal mortality works out to 1.39 per mille as against 1.27 per mille in the previous year. The slight rise in the mortality rate by 0.12 per mille is due to 5 deaths from chronic dysentery and 3 deaths from tubercular enteritis as against one case of chronic dysentery and none of tubercular enteritis in the previous year.

Infant Mortality :—The number of still births was 732 in 1954 as against 732 in 1953 while the total number of births for these two years was 29,209 and 27,219 respectively. The number of infants kept under observation during the first year of life in 1955 was 28,477 as against 26,487 during the year 1954. The mortality among live births was 3,009 while that in the previous year was 2,922. The whereabouts of 2,224 babies could not be traced. The infant mortality rate worked out to 105.7 per mille for 1955 as against 110.31 for 1954.

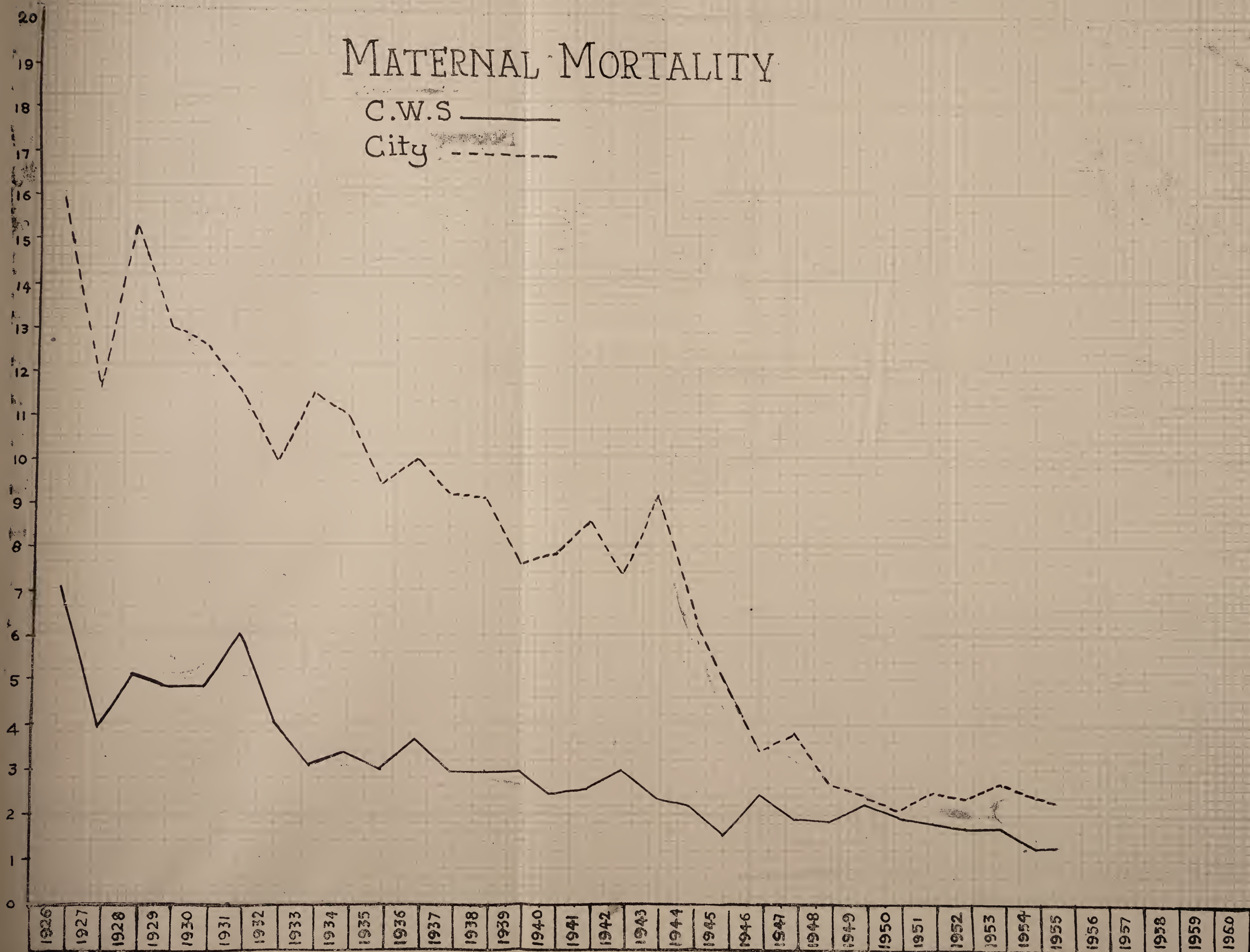
Out-patient Clinic :—The Asst. Surgeons conducted out-patient clinics centres as usual. Infants, pre-school children, expectant mothers and nursing mothers were examined, advised and treated for minor ailments. 59,560 infants, 19,726 pre-school children, 66,707, nursing mothers and 41,614 expectant mothers represent the new cases that were treated and advised. The total number of cases attended to was 5,78,940 inclusive of 3,91,333 old cases.

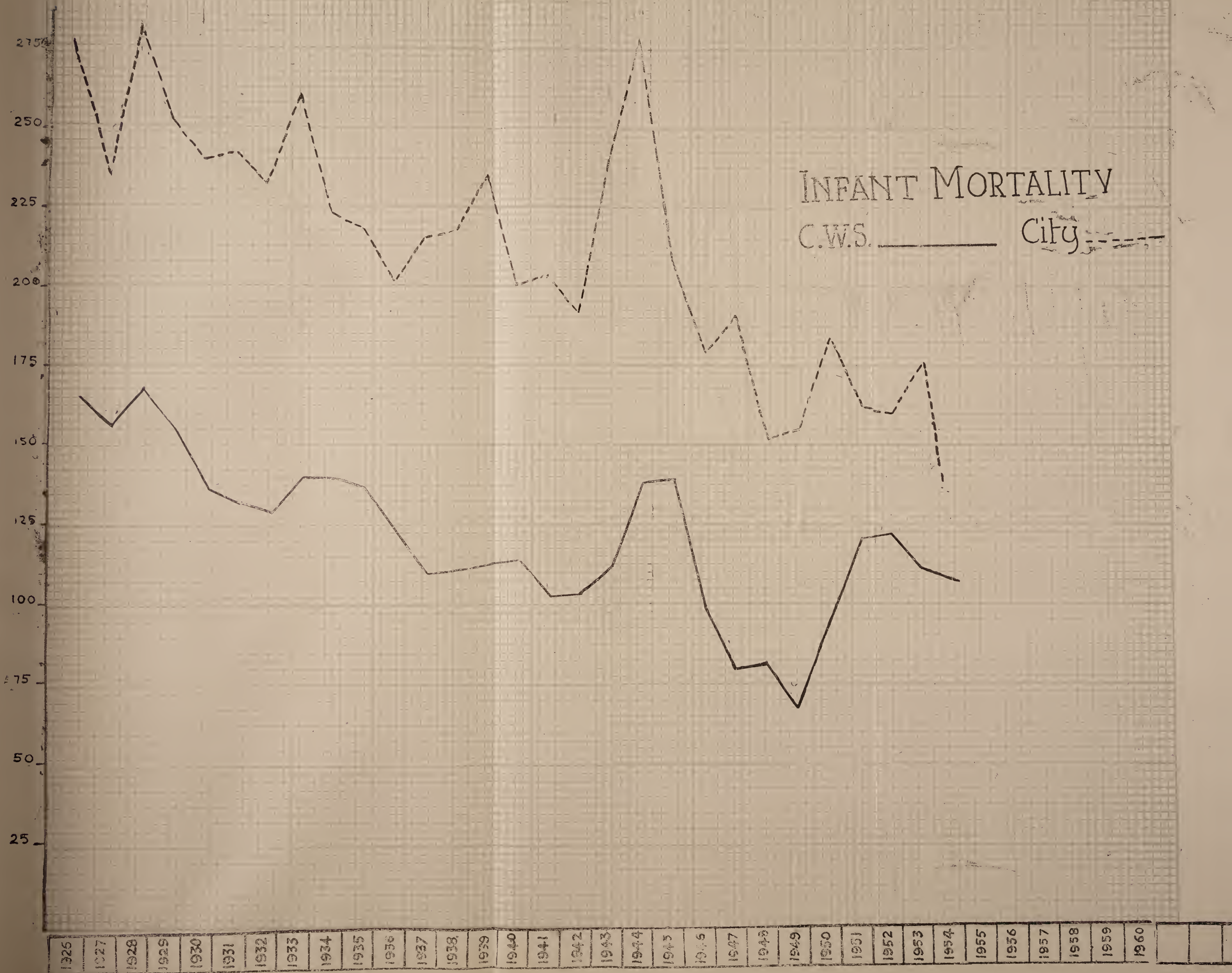
At its meeting held on 7-9-54 the Council resolved to re-organise the child Welfare Scheme on the basis of which the City was to be provided with 6 maternity homes with 50 beds each and one sub-centre for each municipal division. One maternity home under the reorganised scheme was opened on 22-10-55 at Aynavaram and three sub-centres were opened in the 24th, 27th and 48 divisions on 31-8-55 10-6-55 and 30-3-55 respectively.

MATERNAL MORTALITY

C.W.S. ———

City - - - - -





Family Planning :—With regard to Family Planning, the Madras Corporation is the second public institution in India, first being the Bombay Corporation, to start clinics and to render assistance to the public even before the Government decided upon implementing such a scheme on a Nation-wide basis. Three Family Planning Clinics were opened in three child welfare centres on 1-8-52. Subsequently one more such clinic was opened in the year 1954. The four Clinics were being run twice a week, with the assistance of the Lady Asst. Surgeons in charge of the respective child welfare centres.

When Government of India approved the recommendations made by the Family Planning Research Committee and announced the grant of aid to State Governments, Local bodies and private institutions for the implementation of the Family Planning Programme, the Corporation of Madras thought fit to expand its activities in this direction. At its meeting held on 12-7-55, the City Council decided to open 6 more full-time family planning clinics in the City, to accept the grants-in-aid and to maintain them even after the grants-in-aid were stopped by the Government of India. These 6 full-time family planning clinics were inaugurated by the Hon'ble Minister for Health of the Madras State on 11-8-55. All these newly opened full-time clinics are fully equipped for the purpose and are with a full-time staff in charge of the work.

Women resorting to the 10 clinics i.e. (6 full-time and 4 part-time clinics) are given advice on and taught the use of contraceptives to suit their domestic and environmental conditions. With a view to benefit the poor classes of citizens whose economic conditions needed relief, the City Council decided to distribute contraceptive appliances to the public at a nominal cost of 8 annas per set when the actual cost was about Rs. 4-12-0 and to incur the expenditure from its revenue funds. The total no. of persons advised during the year was 16,192.

Ambulance :—Three ambulance vans rendered service during the year. 2,210 cases requiring hospitalisation were transported by these vans to the various maternity hospitals in the City.

Milk Supply :—Cow's milk was continued to be supplied to ill-nourished infants. The total number of such infants fed with fresh milk was 3,185.

Skimmed milk powder received as gift from *Unicef* and the American National Red Cross Society during the year 1954 was supplied to deserving infants over one year, toddlers, expectant and nursing mothers in all the child welfare centres. The following figures give the number of beneficiaries during the year under report.

Infants.	Toddlers.	Expectant mothers.	Nursing mothers.
31,381	3,56 010	70,107	1,66,057

General :—One more 50 bedded maternity home was opened at "Ashok Vihar" on 19-3-56 by the Hon'ble Minister for Health when the Hon'ble Minister for Local Administration presided over the occasion. Two of the Child Welfare Centres at Choolai and Saidapet are now being expanded into maternity homes of 50 beds each. They will be opened shortly.

C. N. RUKMINI,
Lady Superintendent,
Child Welfare Scheme.

REPORT OF THE MADRAS PORT HEALTH OFFICER, MADRAS,
FOR THE YEAR 1955

1. 518 vessels with 32,776 crew and 35,856 passengers were inspected on arrival during the year. None of these vessels were infected.

Out of 518 vessels leaving this port during the year under review, only 381 vessels with 24,065 crew and 29,456 passengers were inspected at the time of departure for foreign ports.

2. 505 cases of second hand imported clothing and blankets were disinfected before the same were released by the Customs Authorities.

Bedding, clothing, etc. of 1163 new crew were inspected and disinfected before articles were taken on board.

3. Seamen's provisions of 86 vessels were inspected and 215 tins of ghee inspected and sealed before being taken on board.

4. The Port Health Officer, Madras, inspected unclaimed articles and food stuffs at the request of (1) the Assistant Director (Clearance), Madras, Ministry of Food., (2) the Chairman, Madras Port Trust and (3) the Traffic Manager, Madras Port Trust, Madras.

554 lots in all such food stuffs etc., were examined during the year of which only 104 lots were found to be fit for human consumption.

5. 494 Seamen trainees, seamen for continuous certificates of discharge and other candidates for employment as seamen were medically examined and certificates of fitness or otherwise issued.

6. On receipt of radio message from the Master of 1 vessel at sea seeking medical advice in connection with sickness on board the vessel, necessary advices were sent immediately to the Master concerned.

7. Sanitation of the Port area was looked after by the Madras Port Trust and maintained satisfactorily. Storage tanks of water supply of the port area, were cleaned regularly and water from these sources was analysed at regular intervals. Measures were taken to rectify the defects when noticed,

8. 21 Deratisation Exemption Certificates and 21 Permits were issued at this port.

(Sd.) M.J.H. WRITER,
Port Health Officer, Madras.

INSTITUTIONS UNDER THE DEPARTMENT

Offices of Registrar of Births & Deaths and Vaccination Depots.

Office hours :—7-30—10-30 A. M.

3-30— 5-30 P. M.

Serial No.	Divisions Served	Location
1	1, 2 & 3	87, Suryanarayana Chetty St., Royapuram
2	4 & 5	546, Thiruvottiyur High Road, Washermanpet
3	6 A	22, Gantz Road, (in the mornings)
4	6 B	55, Madavaram High Road, Perambur (evenings)
5	7, 8, 9 & 10	244, Mint Street
6	11, 12 & 13	47, Linghi Chetty Street
7	14 & 15	161, Govindappa Naick Street
8	16	17, Basin Water Works Street
9	17	Rotler Street, Vepery
10	18 & 19	55, Pulianthope High Road
11	20	23, Paper Mills Road, Sembiam
12	21	127, Konnur High Road, Aynavaram
13	22-A & 25	65, Poonamallee High Road, near Spur Tank
14	22-B & 35-B	Shenoy Nagar
15	23 & 24	6, Gangadareswarar Koil Street
16	26	66, Maddox Street, Vepery
17	27 & 28	23, Kolandai Street, Park Town
18	29 & 30	3/61, Arunachella Naicken Street, Chintadripet
19	31 & 32	34, Poosala Gengu Reddy Street., Egmore
20	33 & 34	15, Noor Veerasami Iyer Street, Nungambakkam
21	35-A	107, Arcot Road. Kodambakkam
22	36 & 47-A	3, Sivagnanam Road, T'Nagar
23	37, 38, 39 & 40	369, Pycrofts Road, Pudupakkam
24	41 & 42	25, Pycrofts Road, Triplicane
25	43	25, B. B. Road, Krishnampet
26	44	101, Kutcheri Road, Mylapore
27	45 & 50-A	63, do
28	46	2/104, Mount Road, Teynampet
29	47-B & 48	1, Karneswarar Koil Street, Saidapet
30	49	32/5, Velacheri Road, Guindy
31	50.B	13, Greenaways Road, Adyar

Offices of Sanitary Inspectors

1	1	21/22 Kappal Polu Chetty Street
2	2	1, Kalmandapam Road
3	3	Robinson Park
4	4	546, Thiruvottiyur High Road, Old Washer-menpet
5	5	do
6	6	Hope Lodge, Gantz Road
7	7	Model Cattle Yard, Basin Bridge Road
8	8	244 Mint Street

Serial No.	Divn. No.	Location.
9	9	31, St. Xavier Street,
10	10	Junction of Moneger Choultry Road & Ebramji Sahib Street
11	11	1/32, Ebramji Sahib Steeet
12	12	6/7, Adam Street, Harbour
13	13	47, Linghi Chetty Street
14	14	3/48, Thatha Muthiyappan Street
15	15	161, Govindappa Naicken Street,
16	16	183, Waltax Road
17	17-A	39, Veda Vinayagar Road
18	17-B	do
19	18	55, Pulianthope High Road
20	19	1-B, Bashyam Reddy 1st Street
21	20-A & B	25, Paper Mills Road, Sembiam
22	21	127, Konnur High Road. Ayanavaram
23	22-A	65, Poonamallee High Road, Kilpauk
24	22-B	Corporation Market, Shenoy Nagar
25	23	6, Gangadareswarar Koil Road
26	24	39, Vedavinayagar Road
27	25	65, Poonamallee High Road
28	26	66, Maddox Street, Vepery
29	27	28, Wall Tax Road
30	28	23, Kolandai Street
31	29	3-A, Arunachella Naick Street, Chintadripet.
32	30	72, Kalavai Chetty Street, Chintadripet
33	31	83, Harris Road
34	32	34, Poosala Gengu Reddy Street, Egmore
35	33	16-A, Nungambakkam High Road
36	34	21, Village Road, Nungambakkam
37	35-A	107, Arcot Road.
38	35-B	Corporation Market, Shenoy Nagar
39	36	3, Sivagnanam Road, T. Nagar
40	37	368/369, Pycrofts Road
41	38	368/369, Pycrofts Road
42	39	102, Thayar Sahib Street
43	40	25, Pycrofts Road
44	41	25, Pycrofts Road
45	42	22, Chengalroya Mudaly Street, Triplicane
46	43 A & B	25, Barbers Bridge Road
47	44	101, Katcheri Road, Mylapore
48	45	do
49	46	104, Mount Road, Teynampet
50	47-A	3, Sivagnanam Road
51	47-B	22, Brahmin Street, Saidapet
52	48-A	do
53	48-B	do
54	49	32/5, Velacheri Road, Guindy
55	50-A	Mandavali, Street, Mylapore
56	50-B	Bridge Road, Adyar

Dispensaries

Serial No	Divn. No.	Name	Location
1	1	Rayapuram Disp	87, Suryanarayana Chetty St.
2	5	Washermenpet „	85, Tiruvottiyur High Road
3	6	Vyasarpady „	Hope Lodge, Gantz Road
4	6	Perambur „	55, Madavaram High Road
5	8	Mint „	244, Mint Street
6	11	Harbour „	6/7, Adam Street
7	14	Mafuzkhan	
		Garden „	55, Thatha Muthiappen Street
8	16	Trevelyan Basin,,	17, Trevelyan Basin Water Works Street
9	17	Baliah Naidu „	Rotler Street
10	20	Sembiam „	42, Paper Mills Road
11	21	Ayanavaram „	127, Konnur High Road
12	23	Kilpauk „	6, Gangadareswarar Koil Street
13	24	Kosapet „	8, Chellappa Mudali Street
14	29	Chintadripet „	2-61, Arunachala Naick Street
15	31	Egmore „	34, Poosala, Gengu Reddy Street, Egmore
16	34	Nungambakkam	15, Noore Veerasamy Iyer Street
17	35	Kodambakkam,,	107, Arcot Road
18	37	Pudupakkam „	367, Pycrofts Road
19	41	Triplicane „	25, do
20	43	Krishnampet „	25, Barbers Bridge Road
21	45	Mylapore „	101, Katcheri Road
22	46	Teynampet „	104, Mount Road
23	47	T. Nagar „	3, Sivagnanam Road
24	50	Adyar „	Lattice Bridge Road
25	33	Ayurvedic „	Model School Street Thousand Lights
26	13	Mannady Unani,,	47, Linghi Chetty Street
27	18	Puliantope „	55, Puliantope High Road
28	31	Pudupet „	1, Venkatachala Achari Street
29	39	Thiruvateeswaranpet	
		Unani Disp.	102, Thayar Sahib Street
30	3	Royapuram	
		Siddha „	109, Adam Sahib Street
31	17	Choolai „	16, Alathoor Subramania Achari Street
32	19	Otteri „	1-B, Bashyam Reddy 1st Street
33	2	Palmyrah	
		Kuppam „	Near Corporation Model Lines
34	40	Chepauk Dispensary	Khana Bagh Street
35	11	Muthialpet „	Geils Street, G. T.
36	9	Seven Wells „	1/50, St. Xavier Street
37	42	Triplicane „	Gazette Begum Street
38	48	Saidapet „	37, Sadayappa Mudali Street

Clinics

Venereal clinic	82/83, Strahans Road, Perambur
Leprosy clinics	Ice House Road (Beasant Road) Triplicane Hope Lodge, Vyasarpady
T. B. Clinics	Puliantope High Road Government General Hospital Government Stanley Hospital Government Royapettah Hospital Kasturba Gandhi Hospital

Laboratories

Public Health Clinical Laboratory	Ripon Buildings, (Tel. No. 2988/50)
Public Analyst's Laboratory,	Ripon Buildings, (Tel. No. 2988/55)
Water Analyst's Laboratory,	Kilpauk Water Works (Tel. No. 2202)
Malaria Laboratory,	17, Trevelyan Basin Water Works Street

Hospitals

Infectious Diseases Hospital,	Tiruvottiyur High Road, Tondiarpet, (Tel. No. 3117)
Sri. Tiruvotteeswar Tuberculosis Hospital,	391, Konnur High Road, (Tel. 4827)

Ashok Vihar, Health & Recreation Centre, People's Park (Tel. No. 4754)
 Zoological Gardens, Peoples Park (Tel. No. 55314)
 Lethal Chamber, Basin Road
 Hearse :—Corporation Lorry Station (Tel. No. 3457)

Poor Relief

Work House for able bodied beggars Poor House Orphanage	} Suryanarayana Chetty Street, Royapuram (Tel. No. 3550)
Special Home for the diseased and infirm	} Krishnampet

Mid-day meals centres	(Tel. No. 86377) Basin, Road, Kondithope North Range Iyah Mudaly Street, Chintadripet, Central Range (Tel. No. 85763) Conran Smith Road, Gopalapuram-South Range
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Veterinary Dispensaries

Basin Road, Konditope
 Barbers Bridge Road, Krishnampet
 Prasanna Vinayagar Koil St., Mylapore

Corporation Cattle Yards

Basin Road, Kondithope
 Singanna Chetty Street, Chintadripet
 Vinaithirta Vinayaga Mudali Street, Kosapet
 Venkatarangam Pillai Street, Saidapet

Slaughter Houses

Sheep and Cattle

Gantz Road—Perambur Barracks
 Alandur Road—Saidapet

Pigs

Junction of Basin Road and Pulian-
 thoep High Road

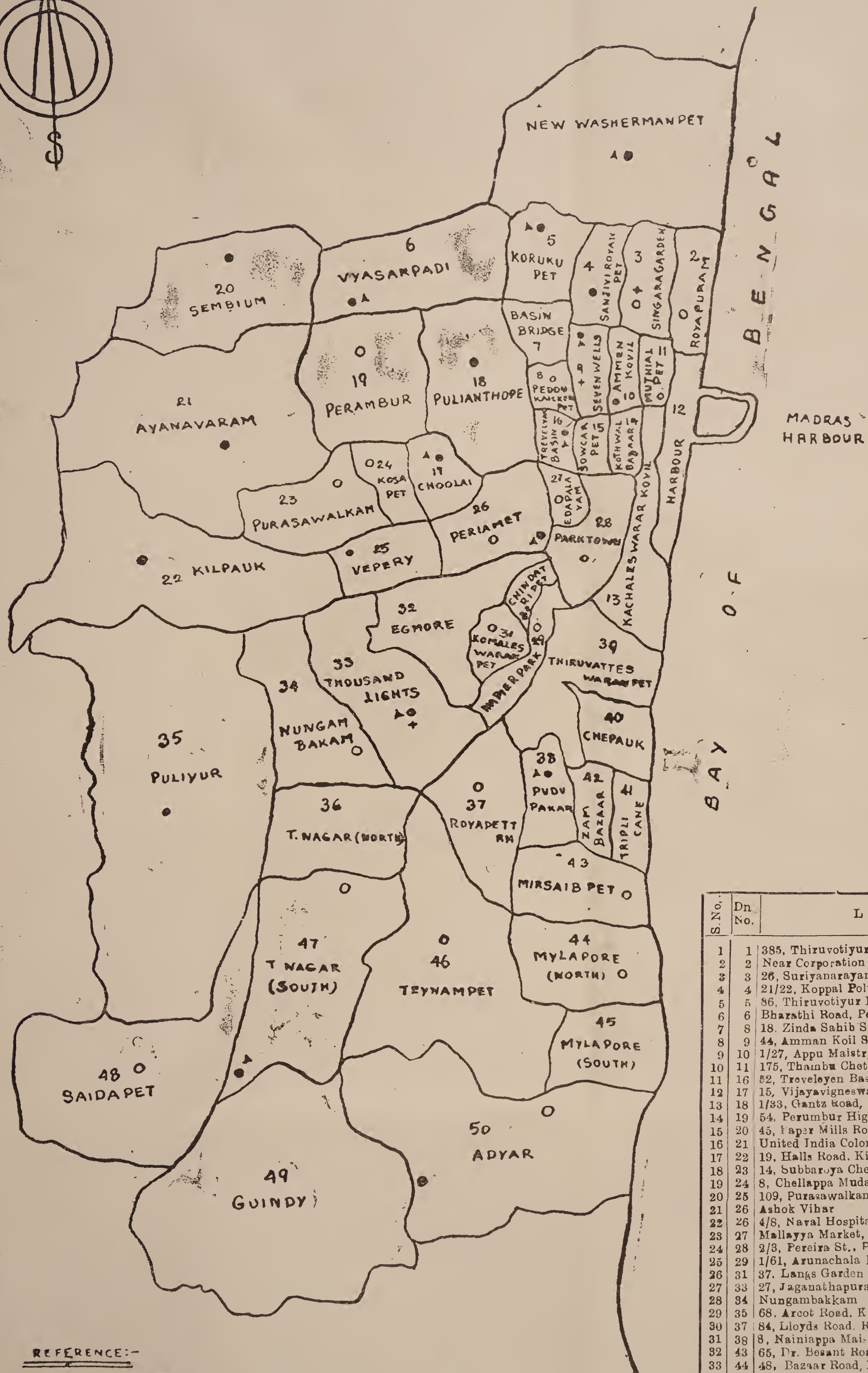
Burial and Burning Grounds

S. No.	Dn.	Name of Burial Ground	Location
1	1	Kasimode Burial and Burning ground	Suryanarayana Chetty Street, Royapuram
2	6	Melpattadai Ponnappa Mudali St. Burial and Burning Ground.	Melpattadai Ponnappa Mudali Street, Perambur
3	6	Manali Road Burial and Burning Ground	Manali Road, Vyasarpady
4	7	Washermenpet Burial and Burning Ground	Kathiawakkam High Road, Washermenpet
5	17	Choolai Cremation Ground	Basin Road, Puliantope
6	20	Thangal Burial and Burning Ground	Thangal, Sembiam
7	20	Peravallur Burial and Burning Ground	Peravallur, Sembiam
8	20	Agaram Burial and Burning Ground	Loco Works Road, Sembiam
9	21	Vailangadu Burial and Burning Ground	Ayanavaram
10	22	Halls Road Burial and Burning Ground	Halls Road, Kilpauk
11	23	Otteri Burial and Burning ground	Brick-kiln Road, Otteri
12	34	Sterling Road Burial and Burning Ground	Sterling Road, Chetpet
13	35-A	Puliyur Burial and Burning Ground	Puliyur, Kodambakkam
14	35-A	Saligramam Burial and Burning Ground	Near Saligramam
15	35-A	Kodambakkam Burial and Burning Ground	Kodambakkm, near A. V. M. Studios

S. No.	Dn.	Name of Burial Ground	Location
16	35-A	Nallankuppam Burial and Burning Ground	Nallankuppam, West Mambalam
17	35-B	Aminjikarai Burial and Burning Ground	Lime Kiln Street, Aminjikarai
18	35-B	Arumbakkm Burial and Burning Ground	Aminjikarai
19	35-B	Naduvankarai Burial and Burning Ground	do
20	35-B	Mullam Burial and Burning Ground	do
21	35-B	Periagudal Burial and Burning Ground	do
22	43	Krishnampet Burial and Burning Ground	Gajapathy Lala Street and Dr. Beasant Road
23	44	Mylapore Burial and Burning Ground	South of Edward Elliotts Road
24	47	Thyagaraya Nagar Burial and Burning Ground	Kannammampet
25	48-B	Saidapet Burial and Burning Ground	Jones Road, Saidapet
26	49	Kottur Burial and Burning Ground	Kottur, Guindy
27	49	Zamin Adyar Burial and Burning Ground	Adyar
28	49	Kallikundram Burial and Burning Ground	Adyar
29	49	Velacheri Burial and Burning Ground	Adyar
30	50-B	Urur Burial and Burning Ground	Urur Village, Adyar
31	1	Muslim Burial Gr.	Surianarayana Chetty, Street
32	1	„ Bhora Burial Gr.	do
33	1	„ Old Burial Gr.	do
34	1	„ Khoja Burial Gr.	do
35	22	Kilpauk Burial Ground	Shenoy Nagar
36	1	Christian Cemetery	Surianarayana Chetty Street
37	22	Kilpauk Cemetery	Shenoy Nagar
38	50	Ellapatha Mada Coil Cemetery	St. Mary's Road, Mylapore
39	1	Chinese Burial Ground	Surianarayana Chetty Street
40	1	Jewish Burial Ground	do
41	22	Buddist Burial Ground	Shenoy Nagar



MAP OF CITY SHOWING THE LOCATION OF CHILD WELFARE CENTRES ETC.



- REFERENCE:-
- - CHILD WELFARE CENTRE WITH MATERNITY WARD
 - - CHILD WELFARE CENTRE
 - +
 - ▲ - FAMILY PLANNING CLINIC

S.No.	Dn. No.	LOCATION
1	1	385, Thiruvotiyur High Road, Tondiarpet
2	2	Near Corporation Model Lines, Palmyrah kuppam
3	3	26, Suriyanarayana Chetty St., Royapuram
4	4	21/22, Koppal Polu Chetty St., Washermanpet
5	5	86, Thiruvotiyur High Road, Washermanpet
6	6	Bharathi Road, Perambur
7	8	18, Zinda Sahib St., Peddunaickenpet
8	9	44, Amman Koil St., G. T.
9	10	1/27, Appu Maistry St., G. T.
10	11	175, Thambu Chetty St., G. T.
11	16	52, Trevelyan Basin St., Sowcarpet
12	17	15, Vijayavigneswarar Koil St., Choolai
13	18	1/33, Gantz Road, Pulianthope
14	19	54, Perumbur High Road, Perumbur
15	20	45, Paper Mills Road, Sembiam
16	21	United India Colony, Ayanavaram
17	22	19, Halls Road, Kilpauk
18	23	14, Subbaraya Chetty St., Nammalwarpet
19	24	8, Chellappa Mudali St., Kosapet
20	25	109, Purasawalkam High Road, Purasawalkam
21	26	Ashok Vihar
22	26	4/8, Naval Hospital Road, Periamet
23	27	Mallappa Market, Wall Tax Road
24	28	2/3, Pereira St., Park Town
25	29	1/61, Arunachala Naicken St., Chintadripet
26	31	37, Langs Garden Road, Pudupet
27	33	27, Jaganathapuram 2nd St., Chetpet
28	34	Nungambakkam
29	35	68, Arcot Road, Kodambakkam
30	37	84, Lloyds Road, Royapettah
31	38	8, Nainappa Maistry Road, Triplicane
32	43	65, Dr. Besant Road, Triplicane
33	44	48, Bazaar Road, Mylapore
34	46	104, Mount Road (Corpn. Dispensary)
35	47	2, Jeenu Road, Saidapet
36	47	3, Sivagnanam Road, (Corpn. Dispensary)
37	48	24, Danapal Chetty St., Saidapet
38	50	34, Brodies Road, Adyar
39	50	44, Vasantha Press Road, Arunachalapuram, Adyar

APPENDIX

Months.	Pressure. Mean Barometric pressure corrected for temperature and reduced to Standard gravity and mean sea level in Millibars 08.30 Hours I.S.T.	Temperature (°F)						Humidity. Mean direction of wind in degrees from North at 08.30 Hours I.S.T.	Wind.	Rainfall in inches.			
		Mean Maxi- mum.	Mean Mini- mum.	Mean daily Range Columns (3—4)	Mean daily tempe- rature ½ of Columns (3+4)	Mean Dew point 08.30 Hours I.S.T.	Difference between mean temperature and Dew point temperature at 08.30 Hours I.S.T. Columns (6—7)			Percen- tage of Humidity at 08.30 Hours I.S.T.	Total fall for the month in inches.	Heavi- est rain- fall in 24 Hours in inches.	No. of Rainy Days 0.10" and over.
1	2	3	4	5	6	7	8	9	10	11	12	13	
January	1016.3	81.9	71.5	10.4	76.7	69.0	7.7	77	39°	3.71	2.47	3	
February	1011.8	84.5	69.5	15.0	77.0	70.5	6.5	81	4°	1.10	1.10	1	
March	1011.6	88.5	72.9	15.6	80.7	72.0	8.7	74	254°	0.00	0.00	—	
April	1009.4	91.3	77.6	13.7	84.5	76.1	8.4	76	204°	1.15	1.04	1	
May	1004.7	93.4	79.9	13.5	86.7	74.4	12.3	71	240°	7.13	3.29	5	
June	1004.1	96.3	80.4	15.9	88.3	70.3	18.0	61	259°	1.89	0.95	4	
July	1006.3	92.4	78.0	14.4	85.2	72.1	13.1	71	245°	3.73	1.76	5	
August	1005.9	89.3	76.3	13.0	82.8	73.1	9.7	79	254°	9.71	3.63	15	
September	1007.6	90.4	77.0	12.6	83.7	75.2	8.5	77	221°	1.93	0.54	5	
October	1009.2	89.2	75.6	13.6	82.4	74.6	7.8	80	255°	8.99	2.45	10	
November	1011.2	83.0	71.7	11.3	77.3	70.5	6.8	80	320°	7.56	2.05	10	
December	1014.8	81.3	69.5	11.8	75.4	66.9	8.5	75	15°	4.74	1.63	6	
Total	12112.9	1061.5	899.9	160.8	980.7	864.7	116.0	902	—	51.64	20.91	65	
Mean	1009.4	88.5	75.0	13.4	81.7	72.1	9.7	75	—	—	—	—	

Births registered in each Division during 1955.

Division No.	Name of Division.	Population according to the census of 1951.			Number of Live Births registered.			Ratio of Births per 1,000 of Population.			Number of males born to every 100 females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.	Number of still births registered.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				
1	New Washermenpet	15,543	15,826	31,369	881	946	1,827	56.7	60.0	58.2	93.1	25.6	...	64
2	Royapuram	10,117	10,734	20,851	529	509	1,038	52.3	47.5	49.8	104.0	27.3	...	31
3	Singara Garden	24,594	18,602	43,196	1,499	1,349	2,848	60.9	72.5	66.0	111.1	38.0	...	177
4	Sanjeevirayanpet	26,660	24,718	51,378	1,301	1,255	2,556	48.8	50.8	49.8	103.7	23.7	...	78
5	Korukupet	16,456	20,150	36,606	1,200	1,193	2,393	72.9	59.2	65.4	100.6	19.1	...	108
6	Vyasarpady	12,641	12,147	24,788	616	604	1,220	48.7	49.7	49.2	102.0	21.5	...	37
7	Basin Bridge	11,472	11,272	22,744	498	473	971	43.4	42.0	42.7	105.3	15.5	...	29
8	Peddunaickenpet	16,011	15,001	31,012	590	583	1,173	36.9	38.8	37.8	101.2	19.9	...	32
9	Seven Wells	14,994	11,990	26,984	652	627	1,279	43.5	52.3	47.4	104.0	18.1	...	35
10	Ammen Coil	12,636	10,954	23,590	502	476	978	39.8	43.5	41.4	105.8	21.6	...	30
11	Muthialpet	12,894	13,297	26,191	497	489	986	38.6	36.8	37.6	101.6	20.7	...	41
12	Harbour	8,950	7,021	15,971	339	304	643	37.9	43.3	40.2	111.5	15.4	...	30
13	Kachaleswarar Coil	7,832	4,961	12,793	263	274	537	33.6	55.2	42.0	96.0	18.7	...	24
14	Kothawal Bazaar	8,771	6,346	15,117	285	276	561	32.5	43.5	37.1	103.3	20.4	...	15
15	Sowcarpet	8,782	6,489	15,271	261	264	525	30.0	40.7	34.4	99.0	18.7	...	25
16	Trevelyan Basin	15,124	14,072	29,196	605	571	1,176	40.0	40.6	40.3	106.0	19.8	...	37
17	Choolai	27,226	25,751	52,977	1,270	1,164	2,434	46.6	45.2	46.0	109.1	24.4	...	74
18	Puliantope	23,000	21,194	44,194	1,227	1,143	2,370	53.3	53.9	53.4	107.4	23.7	...	84
19	Perambur Barracks	14,843	14,662	29,505	592	573	1,165	39.9	39.1	39.5	103.3	14.7	...	35
20	Sembium	14,608	15,677	30,285	819	766	1,585	56.1	49.0	52.3	107.0	24.3	...	58
21	Aynavaram	14,464	14,354	28,818	759	779	1,538	51.8	54.3	53.4	97.4	19.8	...	52
22	Kilpauk	12,629	10,287	22,916	553	513	1,066	43.8	50.0	46.5	108.0	26.9	...	37

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23	Purasawalkam	16,738	14,008	30,746	580	581	1,161	34.6	41.5	37.8	99.8	15.1	...	30
24	Kosapet	20,227	19,407	39,634	992	958	1,950	49.0	49.4	49.2	103.6	22.8	...	55
25	Vepery	8,298	9,136	17,434	328	335	663	39.5	36.7	38.0	98.0	22.2	...	20
26	Periamet	16,728	14,835	31,563	632	606	1,238	38.0	40.8	39.2	104.3	20.5	...	54
27	Edapalayam	10,124	8,358	18,482	329	312	641	32.5	37.3	34.7	105.4	18.0	...	14
28	Park Town	9,160	7,075	16,235	253	225	478	27.6	31.8	29.5	112.4	...	31.8	21
29	Napier Park	10,682	8,876	19,558	376	418	794	35.2	47.1	40.6	90.0	23.1	...	25
30	Chintadripet	13,688	12,809	26,497	582	559	1,141	42.5	43.7	43.1	104.1	21.2	...	34
31	Komaleswaranpet	14,814	13,126	27,940	621	643	1,264	41.9	49.0	45.2	96.6	26.3	...	40
32	Egmore	8,385	8,319	16,704	866	815	1,681	103.3	98.0	100.6	106.3	73.4	...	164
33	Thousand Lights	15,997	15,345	31,342	817	744	1,561	51.1	48.3	49.8	109.8	27.2	...	51
34	Nungambakkam	14,739	12,668	27,407	571	560	1,131	38.8	44.2	41.3	102.0	19.3	...	45
35	Kodambakkam	19,226	17,908	37,134	912	993	1,905	47.4	55.5	51.3	91.8	25.5	...	56
36	Theagarayanagar (North)	10,886	10,487	21,373	483	458	941	44.4	43.7	44.0	105.5	22.6	...	23
37	Royapettah	11,901	11,443	23,344	501	500	1,001	42.1	43.7	42.9	100.2	24.7	...	31
38	Pudupakkam	14,448	14,224	28,672	636	611	1,247	44.0	43.0	43.5	104.1	23.3	...	43
39	Tiruvateswaranpet	15,878	14,485	30,363	766	702	1,468	48.2	48.5	48.3	109.1	26.4	...	51
40	Chepauk	12,818	11,449	24,267	622	612	1,234	48.6	53.5	50.9	101.6	33.9	...	58
41	Triplicane	14,537	12,240	26,777	624	534	1,158	43.0	43.6	43.2	116.9	23.1	...	34
42	Zam Bazaar	13,295	11,749	25,044	563	544	1,107	42.3	46.3	44.2	103.5	23.2	...	30
43	Mirsaibpet	23,307	20,873	44,180	1,211	1,139	2,350	51.5	54.5	53.2	106.3	19.3	...	70
44	Mylapore (North)	17,383	21,351	38,734	864	757	1,621	50.0	35.5	41.8	114.1	20.4	...	53
45	Do (South)	13,137	12,608	25,745	487	466	953	37.1	37.0	37.0	104.5	21.6	...	39
46	Teynampet	17,741	15,736	33,477	735	714	1,449	41.4	45.4	43.3	103.0	21.8	...	54
47	Theagarayanagar (South)	18,630	16,762	35,392	854	880	1,734	45.8	52.5	49.0	97.0	27.6	...	69
48	Saidapet	18,093	16,373	34,466	802	688	1,490	44.3	42.0	43.2	116.6	22.7	...	46
49	Guindy	9,604	7,812	17,416	340	313	653	35.4	40.1	37.5	108.6	17.0	...	19
50	Adyar	14,550	13,548	28,098	786	780	1,566	54.0	57.6	55.7	100.8	29.2	...	52
	Fort St. George	1,752	528	2,280	...	...	...	...	...	...	...	...	...	...
	Total	737,013	679,043	14,16,056	33,871	32,578	66,449	46.0	48.0	40.26	104.0	19.50	...	2,414

Births registered in each Division during each month in 1955.

Division No.	Name of Division.	January	February	March	April	May	June	July	August	September	October	November	December	Total number of births registered.
1	New Washermenpet	126	151	149	147	114	167	144	180	180	136	166	167	1,827
2	Royapuram	73	76	87	85	57	84	80	99	95	75	116	111	1,038
3	Singara Garden	182	207	248	250	233	232	215	234	299	188	272	288	2,848
4	Sanjeevirayanpet	162	165	227	174	199	226	207	226	230	200	249	291	2,556
5	Korukupet	186	164	186	183	171	199	214	209	204	190	253	234	2,393
6	Vyasarpady	82	101	89	95	90	80	97	127	96	83	79	201	1,220
7	Basin Bridge	61	65	84	72	72	86	84	98	84	64	74	127	971
8	Peddunaickenpet	75	65	89	81	104	103	100	111	104	84	112	145	1,173
9	Seven Wells	84	56	116	84	105	98	108	143	103	83	148	151	1,279
10	Ammen Coil	63	59	82	52	67	78	95	111	98	48	103	122	978
11	Muthialpet	46	56	81	79	82	91	73	99	104	76	110	89	986
12	Harbour	42	41	64	52	51	46	55	47	52	51	73	69	643
13	Kachaleswarar Coil	29	24	39	41	43	44	47	45	60	48	66	51	537
14	Kothawal Bazaar	44	34	41	49	46	47	37	56	56	47	49	55	561
15	Sowcarpet	33	20	38	38	42	45	39	67	57	32	57	57	525
16	Trevelyan Basin	78	75	111	91	105	87	89	100	101	90	128	121	1,176
17	Choolai	134	190	199	180	192	188	227	211	207	225	199	282	2,434
18	Puliantope	170	151	201	199	171	179	181	267	212	194	194	251	2,370
19	Perambur Barracks	93	76	74	91	93	92	101	111	108	85	110	131	1,165
20	Sembium	85	105	136	133	128	130	143	140	158	129	126	172	1,585
21	Aynavaram	81	108	124	117	127	106	122	165	135	139	154	160	1,538
22	Kilpauk	63	64	88	68	95	82	85	138	95	79	81	128	1,066

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23	Purasawalkam	...	85	72	99	102	104	93	86	105	109	85	110	111	1,161
24	Kosapet	...	138	104	163	159	143	167	184	215	182	153	161	181	1,950
25	Vepery	...	39	44	46	55	51	47	60	60	52	54	73	82	663
26	Periamet	...	84	54	102	96	106	112	111	121	113	111	109	119	1,238
27	Edapalayam	...	46	36	42	55	52	49	43	70	63	55	50	80	641
28	Park Town	...	20	27	41	52	35	35	35	40	41	37	48	67	478
29	Napier Park	...	58	45	40	55	47	58	81	81	71	79	78	101	794
30	Chintadripet	...	65	71	106	95	76	101	103	99	96	102	104	123	1,141
31	Komaleswaranpet	...	94	73	85	101	101	121	101	114	119	107	125	123	1,264
32	Egmore	...	83	99	118	131	129	150	127	169	176	127	171	201	1,681
33	Thousand Lights	...	93	98	124	129	122	112	115	174	147	140	135	172	1,561
34	Nungambakkam	...	75	63	81	92	101	92	108	94	117	83	109	116	1,131
35	Kodambakkam	...	122	115	146	157	151	172	152	215	153	173	168	181	1,905
36	Theagaraya Nagar (North)	...	43	75	76	60	71	59	87	103	92	76	95	104	941
37	Royapettah	...	76	55	62	85	68	77	89	97	84	95	93	120	1,001
38	Pudupakkam	...	88	73	100	93	122	105	105	124	126	91	106	114	1,247
39	Tiruvatteswaranpet	...	96	106	134	106	108	126	133	139	123	114	132	151	1,468
40	Chepauk	...	72	77	89	116	96	108	87	118	130	73	108	160	1,234
41	Triplicane	...	57	77	103	89	83	90	113	85	110	117	114	120	1,158
42	Zam Bazaar	...	68	73	78	102	89	62	80	102	103	112	100	138	1,107
43	Mirsaibpet	...	164	163	202	193	176	182	188	237	168	202	207	268	2,350
44	Mylapore (North)	...	99	105	127	129	128	127	133	159	136	142	163	173	1,621
45	Do (South)	...	66	52	79	84	82	73	85	92	81	78	89	92	953
46	Teynampet	...	80	80	113	114	154	90	136	152	139	107	132	152	1,449
47	Theagaraya Nagar (South)	...	118	95	113	128	149	141	140	163	164	172	184	167	1,734
48	Saidapet	...	89	89	91	136	111	121	122	153	107	160	165	146	1,490
49	Guindy	...	44	40	46	54	67	49	54	73	55	44	50	77	653
50	Adyar	...	95	95	118	151	131	122	107	163	129	121	147	187	1,566
Total		...	4,249	4,209	5,277	5,280	5,240	5,331	5,508	6,501	6,024	5,356	6,245	7,229	66,449

Births registered among principal communities in each Division during 1955

Division No.	Name of Division.	Aliens		Anglo Indians		Indian christians		Muslims		Hindus		Others		All communities		Total births registered
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1	New Washermenpet	...	...	1	1	55	89	36	14	789	842	...	...	881	946	1,827
2	Royapuram	...	...	13	19	73	78	67	48	376	364	...	...	529	509	1,038
3	Singara Garden	...	...	...	2	72	50	116	96	1,311	1,201	...	...	1,499	1,349	2,848
4	Sanjeevirayanpet	...	...	3	2	48	38	63	57	1,187	1,158	...	...	1,301	1,255	2,556
5	Korukupet	...	...	...	1	7	12	241	254	952	926	...	...	1,200	1,193	2,393
6	Vyasarpady	...	...	...	...	23	11	4	5	589	588	...	...	616	604	1,220
7	Basin Bridge	...	...	1	1	27	18	52	40	418	414	...	...	498	473	971
8	Peddunaickenpet	...	...	...	...	2	1	3	1	585	581	...	...	590	583	1,173
9	Seven Wells	...	...	4	2	21	31	53	57	574	537	...	...	652	627	1,279
10	Ammen Coil	...	...	3	4	39	36	54	52	406	384	...	...	502	476	978
11	Muthialpet	...	...	...	...	11	18	34	31	452	440	...	...	497	489	986
12	Harbour	...	...	...	1	5	2	133	112	200	189	1	...	339	304	643
13	Kachaleswarar Coil	...	...	3	...	6	11	23	30	231	233	...	...	263	274	537
14	Kothawal Bazaar	...	...	...	...	4	3	66	56	215	217	...	...	285	276	561
15	Sowcarpet	...	...	...	...	...	...	...	...	261	264	...	...	261	264	525
16	Trevelyan Basin	...	...	...	...	3	5	2	2	575	544	25	20	605	571	1,176
17	Choolai	...	...	5	...	63	45	21	18	1,181	1,101	...	...	1,270	1,164	2,434
18	Puliantope	...	...	...	...	43	40	264	232	920	871	...	...	1,227	1,143	2,370
19	Perambur Barracks	...	1	1	1	46	47	93	98	452	426	...	...	592	573	1,165
20	Sembium	...	...	20	17	36	30	52	48	711	670	...	1	819	766	1,585
21	Aynavaram	1	...	9	5	46	59	20	41	682	674	1	...	759	779	1,538
22	Kilpauk	...	1	2	...	22	20	11	19	518	471	...	2	553	513	1,066

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23	Purasawalkam	3	1	47	64	13	6	517	510	580	581	1,161
24	Kosapet	4	8	63	66	34	25	891	859	992	958	1,950
25	Vepery	...	2	...	...	5	6	19	24	9	18	293	287	...	...	...	328	335	663
26	Periamet	...	...	...	...	25	9	53	64	57	61	497	472	...	...	...	632	606	1,238
27	Edapalayam	...	...	...	...	...	...	1	...	1	1	327	311	...	...	1	329	312	641
28	Park Town	...	...	...	...	1	3	12	11	2	1	238	209	...	...	...	253	225	478
29	Napier Park	...	...	...	...	3	3	21	21	15	26	337	368	...	...	...	376	418	794
30	Chintadripet	...	...	...	...	8	5	19	27	27	24	528	503	...	...	...	582	559	1,141
31	Komaleswaranpet	...	...	...	...	9	7	73	69	85	79	454	488	...	...	...	621	643	1,264
32	Egmore	...	1	...	...	7	8	62	63	26	16	770	727	...	...	...	866	815	1,681
33	Thousand Lights	...	6	...	...	1	4	111	101	52	49	647	588	...	...	...	817	744	1,561
34	Nungambakkam	...	...	...	...	...	...	29	42	11	9	531	508	...	...	...	571	560	1,131
35	Kodambakkam	...	...	...	...	2	1	28	19	21	24	861	949	...	...	...	912	993	1,905
36	Theagaraya Nagar (North)	...	...	...	...	...	1	15	10	15	8	453	439	...	...	...	483	458	941
37	Royapettah	...	...	...	...	3	4	33	39	32	39	433	418	...	...	...	501	500	1,001
38	Pudupakkam	...	...	...	...	2	2	27	6	173	155	434	448	...	...	...	636	611	1,247
39	Tiruvatteswaranpet	...	...	...	...	3	1	9	10	296	236	457	455	...	1	...	766	702	1,468
40	Chepauk	...	...	...	...	...	2	14	8	87	70	521	532	...	...	...	622	612	1,234
41	Triplicane	...	...	...	...	...	...	...	...	3	4	621	530	...	...	...	624	534	1,158
42	Zam Bazaar	...	...	...	...	...	...	3	2	113	106	447	436	...	...	...	563	544	1,107
43	Mirsaibpet	...	...	...	...	3	...	26	30	290	260	892	849	...	...	...	1,211	1,139	2,350
44	Mylapore (North)	...	...	...	...	...	...	22	26	39	37	800	692	...	3	1	864	757	1,621
45	Do. (South)	...	...	...	...	1	1	40	42	14	10	431	413	...	1	...	487	466	953
46	Teynampet	...	...	...	...	...	1	20	18	5	14	710	679	...	...	...	735	714	1,449
47	Theagaraya Nagar (South)	...	...	...	...	...	...	13	11	11	20	830	849	...	...	...	854	880	1,734
48	Saidapet	...	...	...	...	...	...	2	4	9	3	791	681	...	...	...	802	688	1,490
49	Guindy	...	...	...	...	3	...	18	19	21	19	298	275	...	...	...	340	313	653
50	Adyar	...	...	...	...	1	...	59	40	18	16	708	722	...	...	...	786	780	1,566
Total		...	10	11	149	123	1,491	1,480	2,887	2,647	29,302	28,292	32	25	33,871	32,578	66,449		

Statement showing Area, Density of Population, the number of Deaths and Infant Deaths with rates registered in each Division during 1955.

Division No.	Name of Division.	Area in Square Miles.	Area in Acres.	Density per Acre.	Population according to the census of 1951.			Number of Deaths registered excluding still-Births.			Ratio of Deaths per 1000 of Population			Number of Deaths of Males to every 100 Female Deaths.	Number of Infant Deaths registered			
					Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.					
1	New Washermenpet.	2.6158	1674.1120	21.9	15,543	15,826	31,369	520	503	1,023	33.5	31.8	32.6	103.4	154	155	309	169.0
2	Royapuram	0.4444	284.4160	82.1	10,117	10,734	20,851	240	229	469	23.7	21.3	22.5	104.8	74	60	134	129.1
3	Singara Garden	0.4430	283.5200	177.8	24,594	18,602	43,196	574	635	1,209	23.3	34.1	28.0	90.4	208	177	385	135.2
4	Sanjeevirayanpet	0.5249	335.9360	178.4	26,660	24,718	51,378	646	693	1,339	24.2	28.0	26.1	93.2	212	195	407	159.2
5	Korukupet	1.1113	711.2320	60.1	16,456	20,150	36,606	813	882	1,695	49.4	43.7	46.3	92.2	280	247	527	220.2
6	Vyasarpady	1.9180	1227.5200	23.5	12,641	12,147	24,788	350	338	688	27.7	27.8	27.7	103.6	112	83	195	160.0
7	Basin Bridge	0.3155	201.9200	118.2	11,472	11,272	22,744	287	333	620	25.0	29.6	27.3	86.2	78	66	144	148.3
8	Peddunaickenpet	0.1393	89.1520	405.7	16,011	15,001	31,012	277	279	556	17.3	18.6	17.9	99.3	84	68	152	129.6
9	Seven Wells	0.1491	95.4240	329.9	14,994	11,990	26,984	465	325	790	31.0	27.5	29.3	143.1	74	69	143	111.8
10	Ammen Coil	0.1051	67.2640	409.1	12,636	10,954	23,590	233	235	468	18.4	21.5	19.8	99.2	65	62	127	130.0
11	Muthialpet	0.1437	91.9680	332.3	12,984	13,297	26,191	214	233	447	16.5	17.5	17.0	92.0	68	67	135	136.9
12	Harbour	0.5346	342.1440	54.3	8,950	7,021	15,971	201	196	397	22.4	27.9	25.0	102.6	78	58	136	211.5
13	Kachaleeswarar Coil	0.5244	335.6160	44.4	7,832	4,961	12,793	147	151	298	18.8	30.4	23.3	97.4	46	36	82	152.7
14	Kothawal Bazaar	0.1250	80.0000	220.4	8,771	6,346	15,117	123	130	253	14.0	20.5	16.7	94.6	39	34	73	130.0
15	Sowcarpet	0.1039	66.4960	268.3	8,782	6,489	15,271	134	106	240	15.3	16.3	15.8	126.4	42	28	70	133.3
16	Trevelyan Basin	0.1533	98.1120	347.2	15,124	14,072	29,196	315	282	597	20.8	20.0	20.4	111.7	101	86	187	159.0
17	Choolai	0.3600	230.4000	268.3	27,226	25,751	52,977	582	559	1,141	21.4	21.7	21.5	104.1	166	134	300	123.3
18	Puliantope	0.8840	565.7600	91.1	23,000	21,194	44,194	662	661	1,323	28.8	31.2	30.0	100.2	193	207	400	168.8
19	Perambur Barracks	0.9050	579.2000	59.5	14,843	14,662	29,505	372	358	730	25.1	24.4	24.7	104.0	100	75	175	150.0
20	Sembium	2.0127	1288.1280	27.4	14,608	15,667	30,285	435	414	849	29.8	26.4	28.0	105.1	128	99	227	143.2
21	Ayanavaram	2.6100	1670.4000	20.6	14,464	14,354	28,818	491	477	968	34.0	33.2	33.6	103.0	130	115	245	159.3
22	Kilpauk	2.8542	1826.6880	14.7	12,629	10,287	22,916	223	228	451	17.7	22.2	19.9	97.8	61	59	120	112.6

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23	Purasawalkam	...	0.4353	278.5920	198.8	16,738	14,008	30,746	354	343	697	21.2	24.5	22.8	103.2	116	88	204	175.7
24	Kosapet	...	0.2800	179.2000	258.1	20,227	19,407	39,634	527	521	1,048	26.1	26.8	26.4	101.2	163	144	307	157.4
25	Vepery	...	0.4310	275.8400	73.7	8,298	9,136	17,434	151	125	276	18.2	13.7	15.9	120.8	35	35	70	105.6
26	Periamet	...	0.5667	362.6880	101.5	16,728	14,835	31,563	305	285	590	18.2	19.2	18.7	107.0	93	65	158	127.6
27	Edapalayam	...	0.1090	69.7600	309.2	10,124	8,358	18,482	144	164	308	14.2	19.6	16.6	87.8	30	51	81	126.4
28	Park Town	...	0.3401	217.6640	87.0	9,160	7,075	16,235	661	334	995	72.2	47.2	61.3	198.0	52	36	88	184.1
29	Napier Park	...	0.3001	192.0640	118.8	10,682	8,876	19,558	174	168	342	16.3	19.0	17.5	103.6	43	41	84	105.8
30	Chintadripet	...	0.1384	88.5760	348.9	13,688	12,809	26,497	280	299	579	20.5	23.3	21.9	93.6	90	73	163	142.9
31	Komaleswaranpet	...	0.3181	203.5840	160.1	14,814	13,126	27,940	257	272	529	17.4	20.7	18.9	94.5	84	61	145	114.7
32	Egmore	..	0.7729	494.6560	39.2	8,385	8,319	16,704	210	245	455	25.0	30.0	27.5	85.7	103	76	179	106.5
33	Thousand Lights	...	1.3495	863.6800	42.3	15,997	15,345	31,342	366	344	710	23.0	22.4	22.7	106.4	112	90	202	129.4
34	Nungambakkam	...	1.3821	884.5440	36.2	14,739	12,668	27,407	306	298	604	20.8	23.5	22.4	102.7	101	87	188	166.2
35	Kodambakkam	...	4.2000	2688.0000	16.1	19,226	17,908	37,134	467	490	957	24.6	27.4	26.0	95.3	139	145	284	149.1
36	Theagarayanagar																		
37	(North)	...	1.0360	663.0400	37.6	10,886	10,487	21,373	225	232	457	20.7	22.1	21.4	97.0	70	86	156	165.8
38	Royapettah	...	0.5400	345.6000	78.7	11,901	11,443	23,344	206	218	424	17.3	19.1	18.2	94.5	67	43	110	109.9
39	Pudupakkam	...	0.2238	143.2320	233.6	14,448	14,224	28,672	298	282	580	20.6	20.0	20.3	105.7	77	53	130	104.3
40	Tiruvatteswaranpet		1.0499	671.9360	52.7	15,878	14,485	30,363	364	303	667	23.0	20.9	22.0	120.1	102	79	181	123.3
	Chepauk	...	0.2997	191.8080	147.6	12,818	11,449	24,267	197	215	412	15.4	19.0	17.2	91.6	69	70	139	112.6
41	Triplicane	...	0.1760	112.6400	277.3	14,537	12,240	26,777	280	260	540	19.3	21.3	20.3	108.0	70	63	133	114.8
42	Zam Bazaar	...	0.1391	89.0240	328.2	13,295	11,749	25,044	290	236	526	21.8	20.1	21.0	123.0	77	78	155	140.0
43	Mirsaibpet	...	0.7000	448.0000	115.0	23,307	20,873	44,180	754	744	1,498	32.4	35.7	34.0	101.3	222	204	426	181.3
44	Mylapore (North)...		0.7485	479.0400	94.5	17,383	21,351	38,734	391	440	831	22.5	20.6	21.5	90.0	117	103	220	135.7
45	Do. (South)...		0.4299	275.1360	109.2	13,137	12,608	25,745	187	211	398	14.2	17.0	15.6	90.0	48	42	90	94.4
46	Teynampet	...	1.3310	851.8400	45.8	17,741	15,736	33,477	331	389	720	18.7	24.7	21.7	85.1	107	100	207	142.9
47	Theagarayanagar																		
	(South)	...	1.2320	788.4800	52.5	18,630	16,762	35,392	391	366	757	21.0	21.9	21.4	107.0	131	103	234	135.0
48	Saidapet	...	2.2020	1409.2800	28.6	18,093	16,373	34,466	360	349	709	19.9	21.3	20.6	103.2	105	84	189	127.0
49	Guindy	..	5.3240	3407.3600	6.0	9,604	7,812	17,416	180	177	357	18.8	22.7	20.5	101.7	48	45	93	142.4
50	Adyar	...	4.6080	2949.1200	11.2	14,550	13,548	28,098	358	389	747	24.6	29.0	26.8	92.0	125	103	228	145.6
	Fort St. George	...	...	...	...	1,752	528	2,280	...	...	...	...	...	...	...	...	...	...	...
	Total	...	49.8453	31900.9920	51.74	7,37,013	6,79,043	14,16,056	17,318	16,946	34,264	23.5	24.9	20.76	102.20	5,089	4,428	9,517	143.22

Deaths registered in each Division during each month in 1955.

Division No.	Name of Division.	APPENDIX												Total number of deaths registered (excluding still births)
		January	February	March	April	May	June	July	August	September	October	November	December	
1	New Washermenpet	82	92	72	63	82	92	77	81	94	92	72	124	1,023
2	Royapuram	34	50	42	31	34	40	47	37	32	32	47	43	469
3	Singara Garden	97	124	84	77	97	123	103	111	101	104	83	105	1,209
4	Sanjeevirayanpet	129	124	97	80	110	117	104	126	110	101	102	139	1,339
5	Korukupet	128	134	139	103	131	141	134	155	153	143	128	206	1,695
6	Vyasarpady	48	56	56	50	56	49	54	77	69	53	48	72	688
7	Basin Bridge	43	55	53	34	53	67	45	60	60	39	45	66	620
8	Peddunaickenpet	45	46	46	51	51	40	43	42	46	39	49	58	556
9	Seven Wells	60	74	67	67	69	70	70	55	63	45	67	83	790
10	Ammen Coil	44	33	45	25	51	42	31	53	34	26	36	48	468
11	Muthialpet	42	36	39	24	49	42	34	34	43	43	30	31	447
12	Harbour	37	36	33	41	25	37	28	27	27	38	33	35	397
13	Kachaleswarar Coil	16	21	19	34	23	28	20	24	32	21	28	32	298
14	Kothawal Bazaar	17	21	6	22	30	23	24	20	22	16	22	30	253
15	Sowcarpet	28	18	15	26	16	16	16	13	26	17	24	25	240
16	Trevelyan Basin	37	58	58	56	44	59	42	44	65	40	43	51	597
17	Choolai	102	133	87	83	98	102	94	99	84	66	92	101	1,141
18	Puliantope	107	126	109	85	124	122	84	123	112	93	97	141	1,323
19	Perambur Barracks	67	65	51	45	70	72	60	49	55	43	51	102	730
20	Sembium	65	90	75	71	63	76	68	64	64	46	62	105	849
21	Aynavaram	65	68	75	57	85	95	104	95	79	72	65	108	968
22	Kilpauk	32	45	39	21	36	37	45	48	28	32	36	52	451
23	Purasawalkam	56	73	58	51	50	75	40	58	49	48	64	75	697

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24	Kosapet	...	96	99	101	79	66	94	75	88	85	68	92	105	1,048
25	Vepery	...	26	16	18	28	24	30	22	24	17	20	20	31	276
26	Periamet	..	50	52	44	58	55	41	50	56	47	42	36	59	590
27	Edapalayam	...	42	26	30	24	24	25	30	17	25	21	19	25	308
28	Park Pown	...	78	74	95	85	85	80	93	80	85	76	84	80	995
29	Napier Park	...	19	22	35	19	29	31	31	32	25	26	34	39	342
30	Chintadripet	...	52	59	38	45	50	42	50	55	48	35	34	71	579
31	Komaleswaranpet	...	53	44	43	37	42	48	32	39	51	36	53	51	529
32	Egmore	..	26	44	32	33	34	39	35	40	49	38	45	40	455
33	Thousand Lights	...	44	70	61	59	55	70	43	52	67	70	44	75	710
34	Nungambakkam	...	71	66	40	44	61	37	46	41	52	41	48	57	604
35	Kodambakkam	...	77	80	70	60	75	84	85	87	82	82	74	101	957
36	Theagaraya Nagar (North)	...	45	38	44	23	39	39	43	50	36	30	33	37	457
37	Royapettah	...	31	31	41	26	35	36	38	36	32	33	31	54	424
38	Pudupakkam	...	59	54	49	44	45	45	52	53	38	43	50	48	580
39	Tiruvatteswaranpet	...	35	59	67	48	54	68	51	63	53	46	53	70	667
40	Chepauk	...	39	35	27	29	24	38	31	39	26	25	48	51	412
41	Triplicane	...	44	37	38	55	49	51	45	36	50	38	39	58	540
42	Zam Bazaar	...	43	65	32	45	51	36	40	41	37	44	30	62	526
43	Mirsaibpet	...	126	136	112	97	126	132	134	119	118	130	115	153	1,498
44	Mylapore (North)	...	63	76	72	75	77	76	69	58	64	69	47	85	831
45	Do (South)	...	26	32	38	25	44	42	33	32	33	27	34	32	398
46	Teynampet	...	66	46	58	50	67	71	59	72	53	47	59	72	720
47	Theagaraya Nagar (South)	...	48	62	46	43	67	65	76	80	54	63	81	72	757
48	Saidapet	...	66	46	62	47	58	68	57	71	65	53	55	61	709
49	Guindy	...	19	35	41	29	34	39	26	27	32	16	30	29	357
50	Adyar	...	40	64	66	56	72	56	63	68	55	66	60	81	747
Total		...	2,765	3,046	2,765	2,460	2,889	3,048	2,776	2,951	2,827	2,534	2,672	3,531	34,264

Deaths registered among principal communities in each division during 1955.

Division No.	Name of division.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus		Muslims		Others		All communities		Total deaths registered
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1	New Washermenpet	...	...	1	1	47	46	447	432	25	24	...	...	520	503	1,023
2	Royapuram	...	...	3	2	23	29	178	169	36	29	...	...	240	229	469
3	Singara Garden	...	...	...	2	20	21	475	544	79	68	...	...	574	635	1,209
4	Sanjeevirayanpet	...	...	3	1	24	29	580	619	39	44	...	...	646	693	1,339
5	Korukupet	...	...	...	...	11	5	612	650	190	227	...	...	813	882	1,695
6	Vyasarpany	...	...	...	1	7	5	342	330	1	2	...	...	350	338	688
7	Basin Bridge	...	...	...	...	12	20	245	267	30	46	...	...	287	333	620
8	Peddunaickenpet	...	...	...	...	1	...	274	277	2	2	...	...	277	279	556
9	Seven Wells	...	...	1	1	16	18	417	282	31	24	...	...	465	325	790
10	Ammen Coil	...	...	3	1	25	28	180	178	25	28	...	...	233	235	468
11	Muthialpet	...	...	...	...	10	7	190	206	14	20	...	...	214	233	447
12	Harbour	...	...	1	...	4	5	115	125	81	66	...	...	201	196	397
13	Kachaleswarar Coil	...	...	1	...	4	8	131	136	10	7	1	...	147	151	298
14	Kothawal Bazaar	...	...	...	...	1	1	97	98	25	31	...	...	123	130	253
15	Sowcarpet	...	...	...	...	...	...	134	106	...	...	...	...	134	106	240
16	Trevelyan Basin	...	...	...	...	2	4	306	274	2	...	5	4	315	282	597
17	Choolai	...	...	1	1	26	20	548	528	7	10	...	...	582	559	1,141
18	Puliantope	...	...	1	...	24	33	472	479	165	149	...	...	662	661	1,323
19	Perambur Barracks	...	...	2	...	14	25	280	251	76	82	...	...	372	358	730
20	Sembium	...	...	6	5	18	19	379	371	32	19	...	...	435	414	849
21	Ayanavaram	8	7	31	31	426	414	25	24	1	...	491	477	968
22	Kilpauk	1	12	9	205	212	6	6	223	228	451

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23	Purasawalkam	1	1	28	40	322	301	3	1	343	697
24	Kosapet	3	2	32	39	472	462	20	18	521	1,048
25	Vepery	...	...	...	3	1	11	7	130	112	7	5	...	...	...	...	125	276
26	Periamet	...	...	1	8	3	31	26	237	235	29	20	...	...	...	...	285	590
27	Edapalayam	...	...	...	...	...	...	1	143	163	1	...	...	...	...	...	164	308
28	Park Town	...	...	...	...	...	24	12	599	318	38	4	...	...	...	...	334	995
29	Napier Park	...	...	...	1	...	4	9	157	145	11	14	...	...	...	...	168	342
30	Chintadripet	...	...	...	2	...	21	26	243	257	14	16	...	...	...	...	299	579
31	Komaleswaranpet	...	...	...	2	2	23	26	186	214	46	30	...	...	...	...	272	529
32	Egmore	...	...	...	1	1	12	14	193	225	4	5	...	...	...	...	245	455
33	Thousand Lights	...	1	1	...	...	43	43	290	278	32	22	...	...	...	...	344	710
34	Nungambakkam	...	...	...	...	2	23	19	279	272	4	5	...	...	...	...	298	604
35	Kodambakkam	...	...	...	...	1	15	11	438	466	14	12	...	...	...	...	490	957
36	Theagaraya Nagar (North)	...	...	...	1	...	5	4	212	222	7	6	...	...	...	...	232	457
37	Royapettah	...	1	...	...	3	11	16	181	185	13	14	...	...	...	...	218	424
38	Pudupakkam	...	...	...	...	...	12	7	205	180	81	95	...	...	...	...	282	580
39	Tiruvatteswaranpet	...	...	...	1	...	6	4	201	188	156	111	...	...	...	...	303	667
40	Chepauk	...	...	...	...	...	3	4	153	169	41	42	...	...	...	...	215	412
41	Triplicane	...	...	...	...	...	...	...	275	259	4	1	...	...	...	...	260	540
42	Zam Bazaar	...	...	...	...	...	1	2	202	174	87	60	...	...	...	...	236	526
43	Mirsahibpet	...	...	...	1	1	16	17	521	512	216	214	...	...	...	...	744	1,498
44	Mylapore (North)	...	...	...	...	...	7	13	367	405	16	22	...	...	...	...	440	831
45	Do (South)	...	...	...	1	1	12	16	169	189	5	5	...	...	...	...	211	398
46	Teynampet	...	...	...	...	...	11	8	318	379	2	2	...	...	...	...	389	720
47	Theagaraya Nagar (South)	...	...	...	...	...	2	1	383	353	6	12	...	...	...	...	366	757
48	Saidapet	...	...	...	...	...	4	3	355	340	1	6	...	...	...	...	349	709
49	Guindy	...	...	...	...	1	16	8	152	156	12	12	...	...	...	...	177	357
50	Adyar	...	...	...	1	2	29	26	321	356	7	5	...	...	...	...	389	747
Total		...	2	3	57	44	734	765	14,737	14,463	1,778	1,667	10	4	...	...	16,946	34,264

Deaths registered according to ages and sex in each Division in 1955

Division No.	Name of Division.	Under one year of age		One year and under Five years		Five years and under Ten years		Ten years and under Fifteen years		Fifteen years and under Twenty years		Twenty years and under Thirty years		Thirty years and under Forty years		Forty years and under Fifty years		Fifty years and under Sixty years		Sixty years and above		Total.		
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Total of Males & Females
1	New Washermenpet.	154	155	136	125	23	23	6	6	7	6	24	39	28	29	30	17	50	25	62	78	520	503	1,023
2	Royapuram	74	60	55	55	5	7	2	3	2	1	9	16	12	10	15	14	22	17	44	46	240	229	469
3	Singara Garden	208	177	128	153	18	26	11	13	11	12	28	51	29	39	26	42	40	36	75	86	574	635	1,209
4	Sanjeevirayanpet	212	195	127	166	19	31	9	4	6	12	25	46	34	47	35	31	62	44	117	117	646	693	1,339
5	Korukupet	280	247	202	240	32	28	10	9	10	17	37	58	40	55	54	49	58	53	90	126	813	882	1,695
6	Vyasarpady	112	83	77	81	12	21	6	4	8	4	12	16	9	18	21	25	22	26	71	60	350	338	688
7	Basin Bridge	78	66	70	82	15	19	2	7	3	11	18	37	25	27	19	18	24	26	33	40	287	333	620
8	Peddunaickenpet	84	68	57	62	11	7	3	3	7	7	10	18	17	24	22	11	20	17	46	62	277	279	556
9	Seven Wells	74	69	61	53	21	13	9	12	14	16	47	31	56	23	58	20	57	31	68	57	465	325	790
10	Ammen Coil	65	62	38	35	8	7	4	7	7	6	10	20	23	15	20	11	25	24	33	48	233	235	468
11	Muthialpet	68	67	41	52	5	6	2	—	2	1	10	19	11	15	9	11	21	12	45	50	214	233	447
12	Harbour	78	58	37	41	4	8	3	1	2	4	6	12	16	18	17	16	12	12	26	26	201	196	397
13	Kachaleswarar Coil.	46	36	35	37	10	11	—	2	2	3	14	17	7	7	13	4	5	9	15	25	147	151	298
14	Kothawal Bazaar	39	34	19	19	5	5	3	3	1	4	7	12	11	10	8	10	15	7	15	26	123	130	253
15	Sowcarpet	42	28	18	20	4	1	1	1	3	1	2	3	8	7	9	7	15	11	32	27	134	106	240
16	Trevelyan Basin	101	86	61	51	17	10	8	4	4	6	15	17	13	22	19	13	19	13	58	60	315	282	597
17	Choolai	166	134	127	135	23	31	7	11	6	8	21	29	28	26	40	30	49	41	115	114	582	559	1,141
18	Puliantope	193	207	177	199	29	26	8	6	8	7	31	46	27	29	44	21	42	27	103	93	662	661	1,323
19	Perambur Barracks	100	75	71	91	17	17	3	7	6	7	12	24	17	16	28	20	39	21	79	80	372	358	730
20	Sembium	128	99	87	74	25	28	3	5	11	12	16	21	24	30	24	33	41	30	76	82	435	414	849

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21	Aynavaram	130	115	82	96	12	18	3	7	6	13	32	38	54	30	40	28	47	31	85	101	491	477	968
22	Kilpauk	61	59	35	55	3	10	3	3	5	4	12	19	18	15	17	12	27	17	42	223	228	451	
23	Purasawalkam	116	88	86	84	15	7	4	6	5	8	17	18	16	20	20	17	23	25	52	354	343	697	
24	Kosapet	163	144	130	118	23	16	3	11	7	12	20	26	24	33	31	25	50	30	76	527	521	1,048	
25	Vepery	35	35	21	21	5	8	2	3	3	—	6	7	9	9	10	6	16	7	44	151	125	276	
26	Periamet	93	65	48	60	7	14	2	6	7	8	16	24	18	18	26	20	27	21	61	305	285	590	
27	Edapalayam	30	51	28	28	3	6	3	4	3	6	9	6	8	7	10	10	15	7	35	144	164	308	
28	Park Town	52	36	61	57	25	24	24	16	36	20	97	50	103	39	103	26	95	25	65	661	334	995	
29	Napier Park	43	41	29	33	4	8	4	2	2	5	9	14	13	10	10	11	21	11	39	174	168	342	
30	Chintadripet	90	73	66	69	13	13	2	5	1	7	14	16	25	24	13	14	21	17	35	280	299	579	
31	Komaleswaranpet	84	61	52	71	7	7	4	8	4	2	7	14	16	22	19	16	23	13	41	257	272	529	
32	Egmore	103	76	29	39	7	5	4	2	—	11	9	36	5	28	11	16	13	12	29	210	245	455	
33	Thousand Lights	112	90	98	88	13	17	5	7	2	3	15	20	21	17	15	28	22	13	63	366	344	710	
34	Nungambakkam	101	87	63	63	16	11	5	4	3	4	15	16	17	16	14	15	22	3	50	306	298	604	
35	Kodambakkam	139	145	100	114	15	22	7	5	4	8	13	25	24	20	32	32	35	31	98	467	490	957	
36	Theagaraya Nagar (North)	70	86	65	53	6	12	1	1	4	5	7	19	11	11	7	8	18	14	36	225	232	457	
37	Royapettah	67	43	26	53	7	4	2	1	2	6	5	16	10	10	25	12	19	17	43	206	218	424	
38	Pudupakkam	77	53	48	55	9	14	2	5	7	10	26	24	21	18	27	14	34	20	47	298	282	580	
39	Tiruvatteswaranpet	102	79	63	63	11	7	8	3	9	11	11	21	26	21	26	18	36	17	72	364	303	667	
40	Chepauk	69	70	26	20	4	6	3	4	4	7	10	23	10	15	17	7	22	21	32	197	215	412	
41	Triplicane	70	63	67	43	14	5	3	3	2	5	12	20	8	20	19	14	21	23	64	280	260	540	
42	Zam Bazaar	77	78	53	31	8	9	1	6	8	1	19	14	8	16	25	18	30	11	61	290	236	526	
43	Mirsaibpet	222	204	173	169	19	19	10	9	10	12	41	49	46	47	57	38	39	46	137	754	744	1,498	
44	Mylapore (North)	117	103	102	117	8	24	5	5	5	12	17	24	18	21	26	27	32	26	61	391	440	831	
45	Do. (South)	48	42	34	44	6	6	2	3	—	3	11	9	6	8	9	17	22	15	49	187	211	398	
46	Teynampet	107	100	80	99	14	16	5	6	4	6	10	26	15	17	17	19	31	24	48	331	389	720	
47	Theagaraya Nagar (South)	131	103	101	84	17	14	11	3	5	4	16	23	9	20	15	15	26	17	60	391	366	757	
48	Saidapet	105	84	73	86	16	11	7	5	1	7	8	29	18	18	26	19	29	23	77	360	349	709	
49	Guindy	48	45	40	44	14	5	8	5	2	2	5	13	11	7	12	8	14	8	26	180	177	357	
50	Adyar	125	103	89	114	9	17	6	2	2	6	14	21	8	17	21	18	21	27	63	358	389	747	
Total		5,089	4,428	3,592	3,842	633	680	249	258	273	353	857	1,192	1,031	1,041	1,211	931	1,489	1,054	2,894	3,167	17,318	16,946	34,264
Grand Total		9,517	7,434	1,313	507	626	2,049	2,072	2,142	2,543	6,061	34,264												

Deaths from principal causes registered in each Division in 1955

Division No.	Name of Division.	Plague.	Cholera.	Small-pox.	Measles.	Enteric Fever.	Kalaazar.	Malaria.	Other Fevers.	Dysentery.	Diarrhoea.	Tubercle including Tubercle of Lungs.	General Respira- tory Diseases.	Injuries.	Maternal Deaths.	All other causes.	Total Deaths Registered excluding Still births.
1	New Washermenpet	..	..	..	..	1	..	7	97	135	107	6	317	11	1	332	1,023
2	Royapuram	..	..	*9 }	..	3	1	6	51	39	30	6	152	5	2	174	466
3	Singara Garden	..	..	..	..	6	1	12	131	89	108	19	361	11	14	457	1,209
4	Sanjeevirayanpet	..	..	..	..	9	..	3	110	115	109	9	360	12	15	599	1,339
5	Korukupet	..	..	..	..	7	1	7	178	139	158	9	482	17	5	694	1,695
6	Vyasarpady	..	..	..	..	2	1	1	96	82	80	3	111	14	1	297	688
7	Basin Bridge	..	..	..	..	3	..	1	116	62	72	9	154	4	4	195	620
8	Peddunaickenpet	..	..	2	..	7	..	..	82	37	51	3	136	6	2	230	556
9	Seven Wells	..	..	..	..	5 }	*1 }	..	72	36	53	27	145	26	3	418	790
10	Ammen Coil	..	..	..	..	2	1	..	74	20	33	3	137	4	1	193	468
11	Muthialpet	..	..	..	..	2	..	2	61	24	36	21	110	2	1	188	447
12	Harbour	..	..	..	..	1	..	1	54	35	40	20	102	4	..	140	397
13	Kachaleswarar Coil	..	..	..	..	1	..	..	53	33	20	9	68	2	1	111	298
14	Kothawal Bazaar	..	..	..	..	..	..	5	23	8	16	4	80	3	1	113	253
15	Sowcarpet	..	..	..	..	2	..	1	14	7	13	3	48	2	..	150	240
16	Trevelyan Basin	..	..	..	..	3	..	3	69	44	45	7	149	10	1	266	597
17	Choolai	..	..	1	..	7	1	..	160	73	87	7	337	13	2	453	1,141
18	Puliantope	..	..	..	..	3	..	1	263	129	163	19	301	17	3	424	1,323
19	Perambur Barracks	..	..	..	..	2	..	..	131	105	82	10	143	9	2	246	730
20	Sembium	..	..	..	..	4	1	..	128	59	94	3	175	9	1	375	849
21	Aynavaram	..	..	6	..	2	..	1	73	60	88	20	183	24	..	511	968
22	Kilpauk	..	..	..	..	1	..	1	52	40	27	4	61	8	3	255	451
23	Purasawalkam	..	..	..	..	4	1	1	44	60	55	3	255	7	..	267	697
24	Kosapet	..	..	..	..	5	1	..	63	106	150	39	273	13	6	392	1,048

APPENDIX

APPENDIX

[illegible]

Births, Deaths and Infant Deaths with Rates among Principal Communities in 1955 compared with 1954.

Community.	Population according to the census of 1951.	1955.						1954.					
		Births.			Deaths.			Births.			Deaths.		
		Total number of Births registered (excluding Still Births).	Birth Rate	Total number of Deaths registered (excluding Still Births)	Death Rate.	Total number of Infant Deaths registered.	Infant Death Rate.	Total number of Births registered (excluding Still Births)	Birth Rate.	Total number of Deaths registered (excluding Still Births)	Death Rate.	Total number of Infant Deaths registered	Infant Death Rate.
Aliens	1,534	21	13·69	5	3·26	...	....	23	15·00	14	9·13	2	87·00
Anglo-Indians	13,247	272	20·53	101	8·00	12	44·12	270	20·38	133	10·4	10	37·04
Indian Christians	95,387	2,971	31·15	1,499	15·71	306	103·00	2,565	27·00	1,534	16·08	314	122·42
Muslims	1,40,319	5,534	39·44	3,445	24·55	1,047	189·20	4,796	34·18	3,554	25·33	944	197·00
Hindus	11,55,722	57,594	49·84	29,200	25·27	8,148	141·50	51,572	44·62	27,941	24·20	6,789	131·64
Others	9,847	57	5·80	14	1·4	4	70·20	30	3·15	5	0·5	...	...
Total	14,16,056	66,449	46·93	34,264	24·20	9,517	143·22	59,256	41·85	33,181	23·43	8,059	136·00

Infantile deaths among principal communities in 1955

Community.	Under seven days.		Seven days and under one month.		One month and under six months.		Six months and under one year.		Total.		Total of males and females.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Aliens	...	...	...	...	...	...	...	...	...	...	...
Anglo-Indians	2	1	...	...	4	3	2	...	8	4	12
Indian Christians	49	26	25	10	57	44	57	38	188	118	306
Muslims	113	79	71	57	254	216	137	120	575	472	1,047
Hindus	1,189	922	678	529	1,431	1,316	1,016	1,067	4,314	3,834	8,148
Others	4	...	...	...	...	...	...	...	4	...	4
Total	1,357	1,028	774	596	1,746	1,579	1,212	1,225	5,089	4,428	9,517

APPENDIX

Infant Deaths from Principal Causes by age periods in 1955

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Age periods	Cholera		Small-pox		Measles		Diphtheria		Enteric Fever		Malaria		Fevers		Dysentery		Diarrhoea		Infantile Debility and Malformations including premature birth		Diseases of the Respiratory system		Convulsions		Other causes		Total Infant Deaths	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Under one week.	16	0.67	2	0.09	35	1.47	1,797	75.35	256	10.73	62	2.59	217	9.10	2,385	25.06
One week and under one month	1	0.07	...	...	...	...	...	...	...	...	38	2.77	4	0.29	83	6.06	912	66.57	167	12.19	71	5.19	94	6.86	1,370	14.39
One month and under six months	7	0.21	...	...	6	0.18	...	...	...	...	199	5.98	139	4.18	519	15.61	470	14.13	1,278	38.44	286	8.60	421	12.67	3,325	34.94
Six months and under one year	2	0.08	...	...	19	0.78	...	...	...	...	179	7.35	208	8.54	428	17.56	34	1.39	1,098	45.06	100	4.10	369	15.14	2,437	25.61
Total	10	0.11	...	...	25	0.26	...	...	...	...	432	4.54	353	3.71	1,065	11.19	3,213	33.76	2,799	29.41	519	5.45	1,101	11.57	9,517	100.00

Infantile deaths from principal causes by months in 1955.

Months.	Cholera.	Small-pox.	Measles.	Diphtheria.	Enteric Fever.	Malaria.	Other Fevers.	Dysentery.	Diarrhoea.	Infantile debility and malformations including premature birth.	Diseases of the Respiratory system.	Convulsions.	Other causes.	Total Infantile Deaths in 1955	Total Infantile Deaths in 1954.
January	...	4	...	1	...	...	31	33	77	233	200	43	99	721	564
February	...	1	...	3	...	...	43	39	74	260	241	42	86	789	542
March	...	3	...	3	...	...	34	18	67	199	209	35	81	649	580
April	...	1	...	2	...	...	21	20	44	197	203	44	67	599	517
May	4	...	...	43	33	67	241	238	43	80	749	620
June	...	1	...	1	...	...	57	38	135	223	282	42	129	908	629
July	3	...	...	41	28	116	259	226	43	107	823	702
August	1	...	...	36	34	111	311	237	46	86	862	858
September	3	...	...	27	30	96	344	275	47	96	918	870
October	33	27	80	246	213	39	72	710	574
November	1	...	...	26	12	57	311	200	43	88	738	702
December	3	...	...	40	41	141	389	275	52	110	1,051	901
Total	...	10	...	25	...	...	432	353	1,065	3,213	2,799	519	1,101	9,517	8,059

APPENDIX

Statement showing the number of Live Births by age of mother and order of Live Births registered in the City of Madras during the year 1955.

Age of Mother at Birth.	Order of Confinement of Live Births.															Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 and above.	
Under 15 years	392	251	...	...	...	...	...	...	...	...	...	...	...	...	...	17 660
15-20	6,690	2,687	1,023	444	50	5	...	...	...	...	...	...	...	...	...	34 10,933
20-25	4,564	5,970	4,819	2,709	1,109	474	116	37	12	7	3	...	...	...	...	40 19,860
25-30	1,274	2,651	4,059	4,115	3,339	2,028	992	490	192	67	14	8	1	...	...	42 19,272
30-35	318	543	1,043	1,352	1,815	1,665	1,379	875	410	238	103	36	7	4	1	27 9,816
35-40	80	143	194	268	540	592	704	613	511	330	165	84	17	3	1	22 4,267
40-45	5	13	40	53	73	46	171	182	169	179	95	93	31	8	2	1 1,161
45	...	1	...	6	2	2	14	25	10	32	21	11	7	...	...	6 137
46	...	...	2	...	2	...	1	2	1	...	1	2	...	...	...	...
47	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	1 3
48	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
49	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
50 years and above	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2
Not stated	65	60	103	57	41	9	2	4	4	2	3	3	...	...	...	7 360
Total	13,388	12,319	11,283	9,005	6,971	4,821	3,379	2,232	1,310	855	405	237	63	15	4	197 66,484

The total includes 35 unregistered births registered during 1956.

Deaths registered from principal causes with rates in 1955 compared with the previous five years

Year	Plague		Cholera		Small-pox		Measles		Enteric Fever		Malaria		Other Fevers		Dysentery		Diarrhoea		Tubercle including tubercle of lungs		General Respiratory diseases		Injuries		Maternal deaths		All other causes		Total Deaths	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1950	214	0.21	945	0.93	...	...	230	0.23	102	0.10	2,644	2.61	2,226	2.19	2,109	2.09	813	0.80	8,918	8.80	325	0.32	113	0.11	20,087	19.83	38,726	38.23
1951	216	0.15	490	0.34	2	0.001	256	0.18	91	0.06	3,504	2.44	3,461	2.41	2,234	1.56	898	0.63	9,933	6.93	443	0.31	151	0.10	20,360	14.20	42,039	29.31
1952	182	0.12	127	0.09	6	0.004	276	0.19	75	0.05	3,823	2.57	3,949	2.65	2,665	1.79	627	0.42	10,137	6.81	536	0.36	155	0.10	20,649	13.88	43,207	29.03
1953	709	0.46	98	0.06	...	-	215	0.14	96	0.36	4,684	3.04	3,698	2.40	2,493	1.62	471	0.31	10,010	6.50	525	0.34	155	0.10	20,599	13.36	43,753	28.37
1954	7	0.004	305	0.20	5	0.003	234	0.15	105	0.07	3,115	2.00	2,642	1.70	1,892	1.19	403	0.25	8,198	5.14	488	0.31	150	0.10	15,637	9.80	33,181	20.78
Mean of the previous five years.	266	0.12	393	0.32	3	0.002	242	0.18	94	0.13	3,554	2.53	3,195	2.27	2,279	1.65	642	0.48	9,439	6.84	463	0.33	145	0.10	19,467	14.21	40,181	29.14
1955	37	0.02	...	...	182	0.11	75	0.05	3,191	1.93	2,788	1.69	2,392	1.45	442	0.27	8,142	4.93	497	0.30	161	0.10	16,357	9.91	34,264	20.76

APPENDIX

Births, Deaths, Still Births, Infant deaths and deaths from principal causes registered with rates during 1955 and in previous ten years

Year	Births excluding Still Births	Deaths excluding Still Births	Still Births	Infant Deaths	Plague		Cholera		Small Pox	Measles	Enteric Fever		Malaria		Other Fevers	Dysentery		Diarrhoea		Tubercle includ- ing Tubercle of Lungs		General Respira- tory Diseases	Injuries	Mater- nal Deaths	All other causes											
					Deaths	Rate	Deaths	Rate			Deaths	Rate	Deaths	Rate		Deaths	Rate	Deaths	Rate	Deaths	Rate															
1945	30,549	36.63	27,277	32.71	1,107	36.2	6,532	213.82	...	...	30	0.04	233	0.28	2	0.002	126	0.15	46	0.06	2,963	3.55	1,838	2.20	1,165	1.40	410	0.49	6,009	7.21	313	0.39	155	5.07	13,987	16.77
1946	41,874	43.91	27,381	28.71	1,505	35.9	7,663	183.00	...	...	1	0.001	184	0.19	...	...	107	0.11	45	0.05	2,746	2.88	1,627	1.71	1,383	1.45	405	0.42	5,878	6.16	291	0.31	149	3.56	14,565	15.27
1947	40,753	42.08	29,979	30.96	1,408	34.6	7,987	195.99	10.001	...	2	0.002	20	0.02	...	...	163	0.17	55	0.06	2,862	2.96	2,048	2.11	1,799	1.86	502	0.52	6,803	7.03	396	0.41	159	3.90	15,169	15.67
1948	50,222	51.09	31,002	31.54	1,549	30.8	7,833	155.97	...	...	210	0.21	12	0.01	...	...	143	0.15	40	0.04	2,657	2.70	1,472	1.49	1,640	1.68	621	0.63	7,237	7.36	343	0.35	142	2.83	16,485	16.77
1949	52,362	52.48	32,639	32.71	1,733	33.1	8,304	158.59	...	...	48	0.15	181	0.18	...	...	192	0.19	37	0.04	2,192	2.20	1,674	1.68	1,546	1.55	700	0.70	8,072	8.09	291	0.29	130	2.48	17,576	17.62
1950	52,619	51.94	38,726	38.23	1,449	27.5	9,878	187.73	...	...	214	0.21	945	0.93	...	...	230	0.23	102	0.10	2,644	2.61	2,226	2.19	2,109	2.09	813	0.80	8,918	8.80	325	0.32	113	2.15	20,087	19.83
1951	58,961	41.11	42,039	29.31	1,634	27.71	9,821	166.57	...	...	216	0.15	490	0.34	2	0.001	256	0.18	91	0.06	3,504	2.44	3,461	2.41	2,234	1.56	898	0.63	9,933	6.93	443	0.31	151	2.50	20,360	14.20
1952	62,921	42.28	43,207	29.03	1,612	25.00	10,308	163.82	...	...	182	0.12	127	0.09	6	0.004	276	0.19	75	0.05	3,823	2.57	3,949	2.65	2,665	1.79	627	0.42	10,137	6.81	536	0.36	155	2.78	20,649	13.88
1953	54,277	35.20	43,753	28.37	1,406	25.25	9,785	180.28	...	...	709	0.46	98	0.06	...	...	215	0.14	96	0.36	4,684	3.04	3,698	2.40	2,493	1.62	471	0.31	10,010	6.50	525	0.34	155	2.78	20,599	13.36
1954	59,256	37.12	33,181	20.78	1,573	25.86	8,059	136.00	...	...	7	0.004	305	0.20	5	0.003	234	0.15	105	0.07	3,115	2.00	2,642	1.70	1,892	1.19	403	0.25	8,198	5.14	488	0.31	150	2.47	15,637	9.80
1955	66,449	40.26	34,264	20.76	2,414	35.05	9,517	143.22	...	...	...	...	37	0.02	...	...	182	0.11	75	0.05	3,191	1.93	2,788	1.69	2,392	1.45	442	0.27	8,142	4.93	497	0.30	161	2.34	16,357	9.91

APPENDIX

VITAL STATISTICS.

Detailed return of deaths in the C

Age at the time of death	Infectious diseases								Fevers						Respiratory diseases			Alimentary diseases		Diseases of the Liver		Circulatory System		
	Cholera	Plague	Small-pox	Measles	Chicken-pox	Typhoid or Enteric Fever	Diphtheria	Others	Malaria	Influenza	Relapsing Fever	Kala-Azar	Rheumatic Fever	Other Fevers	Tuberculosis of Lungs	Pneumonia	Others	Dysentery	Diarrhoea	Others	Cirrhosis	Others	Heart diseases	Arterio Sclerosis
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Under one week	16	...	32	224	2	22	13	...	...	...	...
Under one year <div>Over one week and not exceed- ing one month</div> <div>Over one month and not exceed- ing 6 months</div> <div>Over 6 months and not exceed- ing 12 months</div>	1	...	...	...	...	...	...	...	...	...	...	38	...	58	106	4	74	9	2	2	2	...
	7	...	...	...	6	...	...	...	...	...	...	199	...	551	727	139	474	45	7	9	7	...
	2	...	...	...	19	1	...	1	...	...	...	178	3	486	612	208	399	29	13	9	2	...
Total under one year	10	...	...	...	25	1	...	1	...	...	...	431	3	1127	1669	353	969	96	22	20	11	...
One year and under 5 years	7	...	1	5	55	...	13	2	...	...	...	791	26	481	2004	1177	193	57	195	39	7	...
5 years and under 10 years	3	...	...	23	11	...	5	...	...	1	...	229	19	87	299	211	71	41	49	17	9	1
10 years and under 15 years	2	...	...	18	4	...	5	...	...	3	1	98	23	29	57	47	17	29	17	5	11	...
15 years and under 20 years	5	...	...	31	...	...	6	...	...	3	...	109	41	37	81	39	23	57	3	2	17	...
20 years and under 30 years	4	...	...	56	...	...	18	...	...	10	...	246	109	111	491	151	69	83	19	11	59	2
30 years and under 40 years	3	...	...	30	...	...	11	...	...	6	1	244	92	65	397	193	87	91	23	9	67	1
40 years and under 50 years	1	...	...	12	...	...	6	...	...	5	...	299	65	53	343	167	73	97	31	13	69	1
50 years and under 60 years	2	...	...	5	...	...	7	...	...	1	...	354	44	67	359	183	96	73	19	16	131	2
60 years and upwards...	2	...	...	4	...	...	...	1	355	20	94	291	267	71	99	7	5	173	3
Total	37	...	1	182	95	1	75	3	...	29	3	3156	442	2151	5991	2788	1669	723	385	137	554	10

f Madras during the year 1955

Bright's disease	Others	Syphilis	Gonorrhoea	Others	Convulsions	Cerebral haemorrhage (apoplexy)	Diseases of the Nervous System			Puerperal sepsis	Accidents of preg- nancy and childbirth			Deficiency diseases	Malignant diseases			Ankylostomiasis	Diabetes	Leprosy	Alcoholism	Congenital debility and malformation, Pre- mature birth	Rabies	Wound and accidents	Snake-bite, Scorpion Sting etc. Killed by wild beasts	Suicides	Poisons	Old age	All other causes	Total deaths from all causes			
							Tetanus	Epilepsy	Others		Abortion	Other accidents and diseases of pregnancy and parturition	Beri-Beri		Rickets	Others	Alimentary tract														Genito-urinary	Breast	Other regions
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
...	...	2	...	1	25	7	7	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	1797	...	...	...	...	...	...	...	214	2385	
...	...	2	...	...	47	...	17	...	7	...	...	...	...	...	7	...	...	...	...	...	...	...	912	...	...	...	...	...	...	...	77	1370	
3	2	1	...	...	226	...	3	1	56	...	...	...	...	19	93	1	...	...	...	...	...	...	470	...	3	...	...	...	...	...	269	3325	
2	2	...	...	...	49	...	3	...	48	...	...	...	...	41	73	1	...	...	1	...	...	...	34	...	5	...	...	...	...	...	205	2437	
5	4	5	...	1	347	7	30	1	134	...	...	...	...	60	173	2	...	...	1	...	...	...	3213	...	8	...	...	...	...	...	765	9517	
9	27	...	...	...	114	1	9	...	57	...	...	...	1	171	113	3	1	...	3	...	...	...	11	4	15	1	...	...	1	...	1821	7434	
7	21	1	...	...	23	1	11	1	31	...	...	...	...	11	17	1	3	...	2	1	...	...	...	13	27	3	...	...	1	...	51	1313	
3	13	...	...	...	3	...	7	3	11	...	...	...	1	1	5	1	1	...	1	...	...	...	...	10	29	3	...	...	1	...	29	507	
1	9	1	...	1	2	2	9	5	9	4	6	20	...	1	1	1	...	...	5	1	...	5	...	...	4	31	2	...	27	2	...	16	626
9	27	2	1	1	5	3	13	1	27	12	9	44	1	...	7	3	2	3	11	...	3	9	...	...	5	79	1	...	33	3	...	213	2049
9	29	1	1	1	2	7	11	3	29	11	9	38	...	1	11	7	7	1	9	1	5	11	...	...	2	53	1	...	19	2	...	380	2072
9	37	1	1	1	1	9	5	3	21	1	2	5	1	1	13	13	6	2	17	1	13	7	...	...	5	24	1	...	11	1	...	566	2142
13	51	1	...	1	5	11	5	3	69	...	...	...	1	...	17	11	9	3	13	...	19	13	...	...	1	19	1	...	5	...	31	709	2543
9	79	...	...	1	3	19	5	1	107	...	...	...	...	...	99	7	5	...	7	...	24	4	...	...	1	41	...	...	7	...	2988	1071	6061
34	297	12	3	7	505	60	105	21	495	28	26	107	5	246	456	49	34	9	69	4	64	49	...	3224	45	326	13	...	102	11	3019	5621	34264

APPENDIX

Division No.	Name of Division	Population as per census of 1951	Total number of Person Vaccinated			Primary Vaccination							Revaccination				Percentage of successful cases in which the results were known							
						Total			Successful				Total			Result								
			Males	Females	Total	Males	Females	Total	Under one year	One year and under Five years	Five years and under ten years	Ten years and above	Total	Unknown	Males	Females			Total	Successful	Failure	Absent	Primary	Revaccination
1	New Washermenpet	31,369	4,485	4,378	8,863	569	594	1,163	855	270	34	4	1,163	...	3,916	3,784	7,700	387	4,820	2,493	100.0	7.4		
2	Royapuram	20,851	1,857	2,093	3,950	382	347	729	582	119	7	1	709	11	1,475	1,746	3,221	202	2,418	601	98.7	8.0		
3	Singara Garden	43,196	2,859	2,874	5,733	787	778	1,565	1,269	284	12	...	1,565	...	2,072	2,096	4,168	144	3,332	692	100.0	4.1		
4	Sanjivirayanpet	51,378	4,769	4,674	9,443	1,112	1,065	2,177	1,821	312	44	...	2,177	...	3,657	3,609	7,266	180	5,111	1,975	100.0	3.4		
5	Korukupet	36,606	4,508	4,439	8,947	940	861	1,801	1,406	340	53	2	1,801	...	3,568	3,578	7,146	214	5,420	1,512	100.0	3.8		
6	Vyasarpady	24,788	2,428	2,845	5,273	539	514	1,053	849	179	13	2	1,043	3	1,889	2,331	4,220	129	3,034	1,057	99.3	4.0		
7	Basin Bridge	22,744	2,899	2,283	5,182	422	478	900	696	195	4	...	895	...	2,477	1,805	4,282	115	3,163	1,004	99.4	3.5		
8	Peddunaickenpet	31,012	2,807	3,323	6,130	482	555	1,037	868	155	14	...	1,037	...	2,325	2,768	5,093	167	3,926	1,000	100.0	4.0		
9	Seven Wells	26,984	3,077	2,302	5,379	521	551	1,072	843	216	13	...	1,072	...	2,556	1,751	4,307	159	3,276	872	100.0	4.6		
10	Ammen Coil	23,590	3,038	2,611	5,649	357	421	778	610	161	7	...	778	...	2,681	2,190	4,871	119	3,446	1,306	100.0	4.6		
11	Muthialpet	26,191	2,669	2,271	4,940	479	421	900	674	211	11	4	900	...	2,190	1,850	4,040	353	2,964	723	100.0	3.3		
12	Harbour	15,971	2,399	1,386	3,785	320	232	552	422	120	10	...	552	...	2,079	1,154	3,233	270	2,195	768	100.0	7.7		
13	Kachaleeswarar Coil	12,793	3,122	1,439	4,561	281	263	544	399	126	19	...	544	...	2,841	1,176	4,017	280	2,946	791	100.0	8.7		
14	Kothawal Bazzar	15,117	2,934	2,507	5,441	263	244	507	407	85	15	...	507	...	2,671	2,263	4,934	84	3,718	1,132	100.0	2.2		
15	Sowcarpet	15,271	2,516	2,223	4,739	288	243	531	429	88	14	...	531	...	2,228	1,980	4,208	103	3,676	429	100.0	2.7		
16	Trevelyan Basin	29,196	3,562	3,463	7,025	576	533	1,109	923	169	14	...	1,106	1	2,986	2,930	5,916	64	5,714	138	99.9	1.1		
17	Choolai	52,977	4,742	5,011	9,753	939	961	1,900	1,662	213	24	...	1,899	...	3,803	4,050	7,853	226	5,941	1,686	99.9	3.7		
18	Pulianthope	44,194	4,354	3,386	7,740	908	866	1,774	1,509	255	8	...	1,772	1	3,446	2,520	5,966	160	4,689	1,117	99.9	3.3		
19	Perambur Barracks	29,505	4,303	2,286	6,589	584	509	1,093	975	116	2	...	1,093	...	3,719	1,777	5,496	86	4,615	795	100.0	1.9		
20	Sembiam	30,285	3,725	3,735	7,460	643	538	1,181	977	186	16	...	1,179	...	3,082	3,197	6,279	95	5,582	602	99.8	1.7		
21	Aynavaram	28,818	3,801	3,760	7,561	611	576	1,187	1,001	170	16	...	1,187	...	3,190	3,184	6,374	249	4,936	1,189	100.0	4.8		

22	Kilpauk	22,916	3,379	2,992	6,371	408	411	819	671	129	15	1	816	...	2,971	2,581	5,552	261	4,166	1,125	99.6	6.0
23	Purasawalkam	30,746	2,118	1,674	3,792	500	472	972	807	141	5	...	953	19	1,618	1,202	2,820	86	2,368	366	100.0	3.5
24	Kosapet	39,634	2,649	3,161	5,810	734	745	1,479	1,275	188	16	...	1,479	...	1,915	2,416	4,331	127	3,204	1,000	100.0	3.8
25	Vepery	17,434	2,539	1,811	4,350	302	317	619	509	100	4	...	613	2	2,237	1,494	3,731	191	3,438	102	99.3	5.3
26	Periamet	31,563	2,034	2,688	4,722	530	559	1,089	885	186	18	...	1,089	...	1,504	2,129	3,633	118	2,837	678	100.0	4.0
27	Edapalayam	18,482	2,119	1,667	3,786	318	315	633	485	141	7	...	633	...	1,801	1,352	3,153	173	2,491	489	100.0	6.5
28	Park Town	16,235	2,752	2,075	4,827	291	246	537	404	130	3	...	537	...	2,461	1,829	4,290	182	3,149	959	100.0	5.5
29	Napier Park	19,558	2,531	2,659	5,190	323	329	652	551	94	5	1	651	1	2,208	2,330	4,538	125	2,890	1,523	100.0	4.1
30	Chintadripet	26,497	2,237	2,628	4,865	447	454	901	765	127	8	1	901	...	1,790	2,174	3,964	116	2,738	1,110	100.0	4.1
31	Komaleswaranpet	27,940	2,124	2,098	4,222	455	464	919	759	160	...	...	919	...	1,669	1,634	3,303	71	1,941	1,291	100.0	3.5
32	Egmore	16,704	3,208	2,109	5,317	301	261	562	436	96	30	...	562	...	2,907	1,848	4,755	96	3,755	904	100.0	2.5
33	Thousand Lights	31,342	3,112	3,453	6,565	621	553	1,174	970	193	9	2	1,174	...	2,491	2,900	5,391	96	3,660	1,635	100.0	2.5
34	Nungambakkam	27,407	2,507	2,234	4,741	524	512	1,036	760	258	17	1	1,036	...	1,983	1,722	3,705	67	2,955	683	100.0	2.2
35	Kodambakkam	37,134	4,453	4,087	8,530	789	754	1,543	1,266	239	36	2	1,543	...	3,664	3,333	6,997	405	5,013	1,579	100.0	7.5
36	Theagaraya Nagar (North)	21,373	2,376	1,985	4,361	357	329	686	555	122	7	2	686	...	2,019	1,656	3,675	358	2,850	467	100.0	11.2
37	Royapettah	23,344	1,866	1,870	3,736	421	357	778	682	89	7	...	778	...	1,445	1,513	2,958	32	2,457	469	100.0	1.3
38	Pedupakkam	28,672	2,299	2,320	4,619	501	460	961	807	151	2	...	960	...	1,798	1,860	3,658	54	2,896	708	99.9	1.8
39	Tiruvatteswaranpet	30,363	2,178	1,920	4,098	526	490	1,016	899	106	9	1	1,015	...	1,652	1,430	3,082	77	2,392	613	99.9	3.1
40	Chepauk	24,267	1,775	1,790	3,565	387	393	780	586	184	10	...	780	...	1,388	1,397	2,785	34	2,133	618	100.0	1.6
41	Triplicane	26,777	2,281	2,235	4,516	428	476	904	690	195	11	...	896	8	1,853	1,759	3,612	122	2,505	985	100.0	4.6
42	Zam Bazaar	25,044	2,115	2,068	4,183	480	452	932	791	134	7	...	932	...	1,635	1,616	3,251	120	2,331	800	100.0	4.9
43	Mirsaibpet	44,180	3,463	3,766	7,229	841	823	1,664	1,354	290	19	1	1,664	...	2,622	2,943	5,565	164	4,760	641	100.0	3.3
44	Mylapore (North)	38,734	4,296	3,502	7,798	625	597	1,222	1,043	169	8	1	1,221	1	3,671	2,905	6,576	205	5,757	614	100.0	3.4
45	Do (South)	25,745	2,010	2,263	4,273	411	370	781	640	132	9	...	781	...	1,599	1,893	3,492	79	2,465	948	100.0	3.1
46	Teynampet	33,477	3,324	3,498	6,822	626	616	1,242	1,110	121	10	1	1,242	...	2,698	2,882	5,580	218	4,607	755	100.0	4.5
47	Theagaraya Nagar (South)	35,392	5,707	5,074	10,781	863	813	1,676	1,172	476	28	...	1,676	...	4,844	4,261	9,105	778	6,907	1,420	100.0	10.1
48	Saidapet	34,466	3,887	4,191	8,078	632	589	1,221	1,022	189	10	...	1,221	...	3,255	3,602	6,857	401	4,915	1,541	100.0	7.5
49	Guindy	17,416	2,659	1,619	4,278	292	280	572	495	73	4	...	572	...	2,367	1,339	3,706	119	3,164	423	100.0	3.6
50	Adyar	28,098	4,192	3,517	7,709	601	561	1,162	943	214	5	...	1,162	...	3,591	2,956	6,547	172	4,753	1,622	100.0	3.5
Total		14,16,056	1,53,044	1,40,243	2,93,287	26,537	25,548	52,085	42,509	8,797	669	27	52,002	47	1,26,507	1,14,695	2,41,202	8,833	1,84,419	47,950	99.9	4.6

VACCINATION

STATEMENT No. II

30

Vaccinations performed during each month in 1955

APPENDIX

Months	Primary Vaccination						Revaccination					
	Number of Persons Vaccinated			Results			Number of Persons Revaccinated			Results		
	Males	Females	Total	Success-ful	Failure	Absent	Males	Females	Total	Success-ful	Failure	Absent
January	2,159	2,208	4,367	4,363	1	3	13,839	14,854	28,693	1,367	22,431	4,895
February	2,687	2,679	5,366	5,357	3	6	18,460	16,307	34,767	1,453	26,913	6,401
March	2,756	2,711	5,467	5,462	2	3	15,802	14,687	30,489	11,57	23,201	6,131
April	2,203	2,129	4,332	4,327	4	1	11,468	10,374	21,842	833	16,819	4,190
May	2,010	1,879	3,889	3,882	2	5	8,115	7,486	15,601	537	11,760	3,304
June	2,116	1,967	4,083	4,070	6	7	8,999	8,279	17,278	556	13,054	3,668
July	2,174	2,042	4,216	4,205	9	2	9,999	90,29	19,028	646	14,395	3,987
August	1,978	1,861	3,839	3,832	3	4	8,967	7,539	16,506	510	12,379	3,617
September	2,004	1,968	3,972	3,963	3	6	8,749	7,284	16,033	531	12,247	3,255
October	2,103	1,937	4,040	4,037	1	2	8,319	6,618	14,937	454	11,420	3,063
November	1,993	1,864	3,857	3,852	1	4	7,310	6,378	13,688	437	10,587	2,664
December	2,354	2,303	4,657	4,652	1	4	6,480	5,860	12,340	352	9,213	2,775
Total	26,537	25,548	52,085	52,002	36	47	1,26,507	1,14,695	2,41,202	8,833	1,84,419	47,950

MEDICAL RELIEF

STATEMENT No. 1

Out-turn of Work in Dispensaries in 1955

Serial No.	Division No.	Year of Opening	Dispensary (Location)	Total Attendance		New Cases		Minor Operations	Remarks
				1954	1955	1954	1955		
1	1	1924	Royapuram ...	74,611	65,184	40,686	26,982	62	Allopathic
2	2	1952	Palmyrah Kuppam	92,639	82,184	45,227	43,491	22	"
3	5	1913	Washermanpet ...	125,708	135,440	66,377	73,575	154	"
4	6	1929	Vyasarpady ...	65,425	68,608	33,005	34,455	239	"
5	6	1928	Perambur ...	87,487	88,620	53,324	53,153	547	"
6	8	1923	Mint ...	132,550	127,195	64,542	63,863	68	"
7	12	1929	Harbour ...	80,620	65,440	38,156	31,781	112	"
8	14	1923	Mafuzkhan ...	96,243	87,766	45,006	41,359	265	"
9	16	1919	Trevelyn Basin ...	98,247	72,554	36,533	35,667	135	"
10	17	1899	Baliah Naidu ...	153,670	162,581	82,952	101,609	858	"
11	20	1946	Sembium ...	78,603	86,739	45,302	55,105	488	"
12	21	1948	Ayanavaram ...	86,438	80,924	43,846	41,734	234	"
13	25	1919	Kilpauk ...	72,249	82,031	38,475	44,448	131	"
14	24	1929	Kosapet ...	102,914	102,772	52,334	57,968	474	"
15	29	1909	Chintadripet ...	127,552	139,365	58,644	55,778	137	"
16	34	1923	Nungambakkam...	80,264	87,357	46,054	45,709	681	"
17	32	1923	Egmore ...	68,473	78,463	36,962	40,562	45	"
18	35	1948	Kodambakkam ...	63,321	51,871	35,156	29,433	844	"
19	37	1924	Pudupakkam ...	64,491	66,938	29,872	30,203	115	"
20	41	1918	Triplicane ...	129,834	119,972	60,492	58,202	69	"
21	43	1938	Krishnampet ...	93,704	90,546	47,776	46,093	120	"
22	45	1924	Mylapore ...	72,290	85,746	38,563	44,955	128	"
23	46	1927	Teynampet ...	127,075	101,707	61,776	53,057	157	"
24	47	1922	Theagaraya Nagar.	122,909	106,343	59,860	52,846	116	"
25	50	1948	Adayar ...	42,386	37,652	14,670	20,305	190	"
26	33	1930	Thousand Lights...	97,255	108,967	46,355	48,296	948	Ayurvedic
27	13	1938	Mannady ...	62,981	55,860	26,477	24,345	17	Unani
28	18	1930	Puliyantope ...	71,375	62,454	37,883	34,703	40	"
29	31	1939	Pudupet ...	62,198	50,365	30,134	26,025	132	"
30	39	1932	Thiruvateeswaran- pet ...	97,688	89,389	45,908	43,669	262	"
31	3	1945	Royapuram ...	80,082	85,013	45,642	44,855	41	Siddha
32	17	1931	Choolai ...	162,402	158,848	76,226	73,602	113	"
33	19	1931	Otteri ...	99,694	92,835	54,927	54,468	65	"
34	11	1955	Muthialpet ...	...	65,683	...	30,919	34	Allopathic
35	40	1955	Chepauk ...	...	85,654	...	38,680	22	"

Details of skin and leprosy cases treated in the Corporation skin and leprosy clinics and general dispensaries in 1955

Name of the Institution	Date of opening	New Leprosy cases	Details of New Leprosy Cases										Number of injections for Leprosy	Skin cases		Yearly attendance New and Old Skin and Leprosy cases	Average monthly attendance
			Types		Results of treatment					Number of New Skin cases	Number of injections performed for Skin cases						
			Infective	Non-infective	Number cured	Number improved	Number symptoms free	Number arrested	Number otherwise								
Skin and Leprosy Clinic, Vyasarpady	4-8-1931	969	202	767	...	216	21	97	635	18,289	3,527	23	33,583	2,799			
Skin and Leprosy Clinic, Besant Road, Triplicane	2-2-1934	211	21	190	...	60	18	26	107	8,592	17,158	541	42,092	3,508			
Corporation General dispensaries	...	...	...	...	...	...	...	...	...	...	1,86,011	...	2,24,420	18,702
Total	...	1,180	223	957	...	276	39	123	742	26,881	2,06,696	564	3,00,095	25,009			

Results of Survey of Leprosy in 1955

9-4

Area Surveyed	Population										Cases of Leprosy detected										Gross incidence per 1,000 population examined	Child incidence per 1,000 population examined	Sex incidence (Male)	Sex incidence (Female)	Sex rate male case per 100 cases of Leprosy	Child rate per 100 cases of Leprosy	Open case rate per 100 cases of Leprosy	Suspicious cases for observation	Total of Leprosy cases
	Enumerated					Examined					Infective			Non-infective															
	Males	Females	Male Children	Female Children	Total	Males	Females	Male Children	Female Children	Total	Males	Females	Male Children	Female Children	Total	Males	Females	Male Children	Female Children	Total									
Kosapet (Div. 24) ...	5415	5344	3183	3120	17062	1816	4316	2711	2843	11686	7	2	—	—	9	29	35	29	21	114	10.5	9.1	14.3	8.1	52.7	40.6	7.3	54	123
	2. Beasant Road Leprosy Clinic.																												
Block I (Div. 39) ... (16 streets)	1836	1785	1286	1360	6267	1703	1721	1199	1198	5821	1	—	2	—	3	4	4	3	6	17	3.4	4.2	3.4	3.4	50.0	55.0	15.0	5	20
Block II (Div. 39) ... (15 streets)	3128	3064	2167	2069	10428	2813	3009	2071	2019	9912	1	—	1	—	2	4	6	1	7	18	2.2	2.2	1.4	2.6	35.0	45.0	10.0	1	20
Total ...	4964	4849	3453	3429	16695	4516	4730	3270	3217	15733	2	—	3	—	5	8	10	4	13	35	2.5	3.1	2.2	2.9	42.5	50.0	2.5	6	40

Details of cases treated at the Infectious Diseases Hospital, Tondiarpet, during 1955

Particulars	Small pox	Chicken pox	Measles	Mumps	Cholera	Gastro-Enteritis Dysentery on etc.	Typhoid	Diphtheria	Whooping Cough	Other diseases	Contacts	Total
Number of Patients remained in the hospital on 1-1-55	74	42	3	nil	nil	20	nil	nil	nil	6	36	181
Number of Patients { City admitted during } the year { Mofussil	165	1,159	353	115	nil	1,106	1	1	17	127	528	3,572
Total number of patients treated during the year	273	1,275	381	125	nil	1,280	1	1	17	143	564	4,060
Number discharged	233	1,243	369	117	nil	1,103	1	1	17	102	557	3,743
Number died	37	nil	nil	nil	nil	159	nil	nil	nil	35	nil	231
Mortality percentage	14	nil	nil	nil	nil	12.4	nil	nil	nil	24	nil	5.7
Number of patients remained in the hospital on 31-12-55.	3	32	12	8	nil	18	nil	nil	nil	6	7	86

Showing work done in the Five Tuberculosis Clinics during 1955

S. No.	Particulars (2)	Clinic at the					Total (8)
		Corporation Tuberculosis Clinic at Puliyantoopu (3)	Government General Hospital (4)	Government Stanley Hospital (5)	Government Royapettah Hospital (6)	Government Kasturba Gandhi Hospital (7)	
1	No. of new cases examined :						
	Men	4,537	3,715	2,964	2,067	93	13,376
	Women	3,215	1,730	1,698	1,252	3,498	11,393
	Children	2,110	516	837	506	1,081	5,050
	Total	9,862	5,961	5,499	3,825	4,672	29,819
2	No. of Pulmonary Tuberculosis cases detected:						
	P. T. I	22	592	31	125	61	831
	P. T. II	31	2,726	7	8	177	2,949
	P. T. III	1,278	Nil	993	1,018	345	3,634
	Total	1,331	3,318	1,031	1,151	583	7,414
3	No. of Nonpulmonary Tuberculosis cases :	143	62	299	80	156	740
4	Total No. of Tuberculosis cases detected :	1,474	3,380	1,330	1,231	739	8,154

MEDICAL RELIEF

Showing work done in the Five Tuberculosis Clinics during 1955

APPENDIX

(1)	(2)	Corporation Tuberculosis Clinic at Puliyantope (3)	Clinic at the				Total (8)
			Government General Hospital (4)	Government Stanley Hospital (5)	Government Royapettah Hospital (6)	Government Kasturba Gandhi Hospital (7)	
5	No. of old cases attended:						
	Men	...	16,446	17,332	11,043	Nil	62,348
	Women	...	13,508	15,748	6,467	11,165	57,394
	Children	...	1,374	1,583	1,045	2,727	9,119
	Total	...	31,328	34,663	18,555	13,892	1,28,861
6	No. of A. P. initial	41	24	13	3	4	85
7	No. of A. P. refills	899	156	63	139	44	1,301
8	No. of patients attended for A. P. refills	...	11	30	6	7	54
9	No. of P. P. initial	52	79	50	15	12	208
10	No. of P. P. refills	2,749	3,336	985	810	220	8,100
11	No. of patients attended for P. P. refill	...	84	392	47	23	546

12	No. of Streptomycin and other injections given	...	4,294	10,594	4,671	4,735	5,207	29,501
13	No. of Screenings done	...	...	7,054	4,160	3,382	4,748	19,344
14	No. of aspirations done	..	Nil	156	17	19	6	198
15	No. of houses visited by the Medical Officer		...	490	246	450	498	1,684
16	No. of house visits by Health Visitor's	...	1,506	2,725	2,482	1,993	1,170	9,876
17	No. of Contacts examined	...	1,296	1,297	1,312	583	774	5,262
18	No. of Pulmonary Tuberculosis cases found among Contacts :							
	P. T. I		25	67	84	14	10	200
	P. T. II	...	1	Nil	10	Nil	30	41
	P. T. III	...	29	46	32	16	28	151
	Total	...	55	113	126	30	68	392

MEDICAL INSPECTION

STATEMENT No. I—(Contd.)

Group	No. on roll		Average daily attendance		No. examined		No. defective		Percentage	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	4990	4007	3585	3464	5232	6218	2117	2547	40·46	40·96
Regular	19962	16028	14352	13856	9866	6157	3551	2733	35·99	44·39
Total ...	24952	20035	17937	17320	15098	12375	5668	5280	37·77	42·68

MEDICAL INSPECTION

Treatment Table

STATEMENT No. II

Group	No. treated at Schools	No. sent to Corporation Dispensaries	No. sent to Government Hospitals	No. referred to Govt. Ophthalmic Hospital	No. referred to Tuberculosis Hospital	No. of parents met	No. of re-visits paid to Schools	No. of re-examinations of children
Boys	3667	339	688	67	9	921	135	4028
Girls	4443	573	255	48	Nil	593	140	7282
Total ...	8110	912	943	115	9	1514	275	11,310

MEDICAL INSPECTION

Height and Weight Tables

STATEMENT No. III

Age in years	Average Height in inches		Average Weight in pounds		Quinquennial Average Height in inches		Quinquennial Average Weight in pounds	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
5	39·14	38·42	31·87	28·56	39·61	38·24	32·28	29·43
6	38·93	40·08	33·38	30·96	40·11	39·91	33·22	31·97
7	41·64	42·22	36·47	33·27	42·07	42·73	35·68	34·44
8	43·13	43·82	38·19	36·50	44·16	43·70	38·41	37·41
9	45·64	46·14	42·95	39·23	46·26	46·03	42·25	40·33
10	47·73	48·53	46·75	43·58	47·64	48·12	45·97	43·72
11	49·78	50·77	49·34	48·81	49·73	50·42	49·24	48·23
12	50·76	52·46	51·05	52·75	50·79	52·43	51·21	52·21
13	52·43	54·35	55·96	59·16	52·65	54·36	55·10	59·28
14	54·74	56·71	62·83	66·96	55·46	56·83	59·92	68·84
15	58·35	58·13	68·21	74·34	56·83	58·84	65·57	75·60

SANITATION

STATEMENT No. I

Statement showing the length of Sewers laid during 1955

Serial No.	Name of area	Length of Sewers laid (in feet).
1	Tondiarpet	11,173·4
2	Royapuram	1,919·4
3	Purasawalkam	1,711·6
4	Perambur	377·11
5	Sembiam	4,108·0
6	Nammalwarpet	2,876·0
7	Aminjikarai	6,824·5
8	Kilpauk	2,217·0
9	Chetput	912·0
10	Greames Road	691·3
11	Ice House Road	384·6
12	North Mylapore	7,309·6
13	South Mylapore	534·6
14	T. Nagar	4,555·9
15	Gandhi Nagar	1,225·4

SANITATION

STATEMENT No. II

Statement showing disposal of applications for licences in 1955

Serial No.	Description of trade	No. of cases dealt with	No. Sanctioned	No. Refused	No. Pending
1	Aerated water and ice factory ...	74	74	...	...
2	Ammunition gun powder and nitro compounds ...	11	11	...	...
3	Beating metals, iron hammering, casting metals ...	196	165	14	17
4	Beedies ...	138	133	...	5
5	Blood and bones ...	...	...	...	...
6	Buildings ...	3374	3374	...	...
7	Brick kiln and chambers ...	46	46	...	...
8	Camphor ...	23	23	...	...
9	Charcoal, coke, coal ...	886	845	32	9
10	Chemical preparation ...	54	45	7	2
11	Candles ...	10	10	...	...
12	Cart stands cycle stands ...	38	38	...	...
13	Catgut and tallowes ...	2	2	...	...
14	Cattle yards and hack stables ...	967	905	42	19
15	Chillies ...	3549	3549	...	...
16	Chlorate mixture ...	5	5	...	...
17	Cigars and cigarettes ...	102	102	...	...
18	Cinema films, studios combustable materials ...	49	40	6	3
19	Cocoanut fibre ...	16	16	...	...
20	Cotton ...	43	43	...	...
21	Coffee hotels, sweetmeat stalls, eating houses, trash bazaars, bakeries, teaclubs, appams ...	3725	3463	243	19
22	Condiments seekai, flour oil mills using machines ...	1658	1588	43	27
23	Diary produce ...	1085	1085	...	...
24	Dyeing cloth and yarn ...	56	46	7	3
25	Erection of machinery ...	1290	1266	15	9
26	Fireworks ...	945	945	...	...
27	Fish ...	14	11	3	...
28	Fleshing and offal ...	2	2	...	...
29	Fuel and firewood ...	873	812	46	15
30	Gas ...	26	26	...	...
31	Gilding and electroplating ...	185	185	...	...
32	Grains ...	4637	4637	...	...
33	Grave diggers ...	158	158	...	...
34	Groundnut ...	57	57	...	...
35	Grass hay staw, dry leaves thatched materials ...	396	376	4	16
36	Gunny bags ...	42	42	...	...
37	Gold refining ...	21	21	...	...
38	Hides, skin, leather ...	196	183	5	8
39	Hoofs, horn, hair and wool ...	15	15	...	...
40	Jaggery ...	3549	3549	...	...

SANITATION

STATEMENT No. II

—(contd.)

Statement showing disposal of applications for licences in 1955

Serial No.	Description of trade	No. of cases dealt with	No. Sanctioned	No. Refused	No. Pending
41	Kunkumam ...	6	6	...	...
42	Limel Lime shell and lime kiln ...	28	17	7	4
43	Markets ...	42	42	...	...
44	Matches ...	53	53	...	...
45	Mutton stalls ...	128	101	23	4
46	Oil storing ...	777	777	...	...
47	Onion and garlic ...	46	46	...	...
48	Pitch, tar, asphalt ...	32	22	6	4
49	Pottery kiln ...	24	24	...	...
50	Poultry ...	5	5	...	...
51	Rosin ...	17	17	...	...
52	Salt petre and sulphur ...	29	29	...	...
53	Shaving saloons ...	1178	1123	43	12
54	Snuff ...	94	84	6	4
55	Spirits ...	43	38	2	3
56	Timber, casurina posts and bamboos ...	289	272	...	17
57	Turpentine ...	23	23	...	...
58	Tobacco ...	96	96	...	...
59	Workplace, glass cutting ...	848	817	25	6
60	Washing soiled cloth etc. ...	1125	1080	38	7

APPENDIX

Nature of samples	1955			1950		1951		1952		1953		1954	
	Number of samples analysed	Number of adulterated samples	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples
Milk	3,002	1,503	50.1	2,880	72.0	2,837	76.0	2,810	72.5	3,338	66.7	3,141	56.1
Butter	498	155	31.1	475	24.8	467	30.4	470	39.1	680	30.3	601	36.1
Ghee	742	178	24.0	725	11.3	718	24.0	683	31.3	910	19.3	798	27.1
Gingelly oil	343	69	20.1	313	12.4	320	12.2	362	19.3	331	14.5	201	33.8
Groundnut oil	13	2	15.4	86	4.7	57	5.3	36	2.8	30	3.3	123	4.1
Cocoanut oil	154	11	7.1	286	11.5	234	9.8	156	6.4	143	2.8	163	7.4
Coffee powder	138	66	47.8	196	2.0	176	10.2	169	55.6	127	32.3	120	56.7
Tea	23	...	...	22	...	33	15.2	35	...	31	...	21	14.3
Ghee Substitutes	9	3	33.3	19	26.3	13	38.5	30	16.7	21	19.0	31	19.4
Other articles	108	60	55.6	59	45.8	76	10.5	76	43.4	124	51.6	104	51.9
Total	5,030	2,047	40.7	5,061	47.2	4,931	52.2	4,827	54.8	5,735	44.8	5,303	45.5

FOOD ANALYSIS

APPENDIX

Nature of samples	Adulterated samples among the samples analysed in 1955				Adulterated samples of the previous year pending disposal on 1-1-1955				Total number of adulterated samples dealt with during 1955				Average fine per conviction in 1955	Number of convictions in 1954	Total fines imposed in 1954	Average fine per conviction in 1954				
	Number of samples	Number of convictions	Number seized under Section 9 and forfeited or destroyed under Section 12 without prosecution	Number taken under Section 14 but acquitted, withdrawn or not prosecuted	Number pending disposal on 31-12-1955	Number of samples	Number of convictions	Number seized under Section 9 and forfeited or destroyed under Section 12 without prosecution	Number taken under Section 14 but acquitted, withdrawn or not prosecuted	Number pending disposal on 31-12-1955										
Milk	1,503	833	...	59	611	2,336	403	...	1,605	328	3,839	1,236	...	1,664	939	37,508	30	1,442	25,884	18
Butter	155	91	...	26	38	151	50	...	80	21	306	141	...	106	59	6,309	45	200	3,789	19
Ghee	178	111	...	...	67	265	51	...	158	56	443	162	...	158	123	9,842	61	154	5,107	33
Gingelly oil	69	48	...	...	21	24	13	...	5	6	93	61	...	5	27	2,762	45	61	1,392	23
Groundnut oil	2	1	...	...	1	2	1	...	1	...	4	2	...	1	1	30	15	3	90	30
Cocoanut oil	11	7	...	...	4	5	5	...	...	...	16	12	...	...	4	413	34	11	288	26
Coffee powder	66	43	...	1	25	45	21	...	16	8	114	64	...	17	33	3,015	47	47	1,074	23
Tea	...	...	...	...	...	2	...	...	...	2	2	...	...	...	2	...	...	1	15	15
Ghee Substitutes	3	1	...	...	2	5	1	...	3	1	8	2	...	3	3	75	38	4	90	23
Other articles	60	33	...	2	25	26	19	...	5	2	86	52	...	7	27	1,885	36	42	815	19
Total	2,047	1,168	...	88	794	2,861	564	...	1,873	424	4,911	1,732	...	1,961	1,218	61,839	36	1,965	38,544	20

Showing the number of samples of water tested for bacteriological and chemical purposes in 1955

h—12

Serial No.	Description of samples	Number of Samples	Remarks
1	From the sources of the Kortalayar River system	24	...
2	From the headworks at the Kilpauk Water Works	837	...
3	From the infiltration gallery well at Sembiam	...	...
4	From the infiltration gallery well at Saidapet	6	...
5	From the Kortalayar distribution system	1428	...
6	From the Sembiam distribution system	120	...
7	From the Saidapet distribution system	84	...
8	From the shallow wells at Adyar, Kodambakkam and Saidapet	52	...
9	From Private wells	90	...
10	From the sterilisation of water mains	334	...
Total ...		2975	

WATER ANALYSIS

STATEMENT No. II

Monthly average levels in the three Reservoirs and total (monthly) rainfall recorded in their respective catchments in 1955.

Months	Red Hills Reservoir		Sholavaram Reservoir		Sathyamurthy Sagar Reservoir	
	Average lake level in feet	Total rain-fall recorded in region (inches)	Average lake level in feet	Total rain-fall recorded in region (inches)	Average lake level in feet	Total rain-fall recorded in region (inches)
January	45.87	2.65	61.96	3.96	136.36	2.93
February	45.61	1.32	62.07	0.70	136.07	0.20
March	44.52	Nil	61.27	Nil	135.12	Nil
April	43.10	1.04	59.45	1.34	134.08	1.01
May	42.27	5.73	58.74	6.41	133.67	6.81
June	41.76	0.84	58.11	0.62	133.25	1.13
July	40.47	3.36	58.10	3.07	132.53	4.02
August	40.40	6.86	57.95	8.28	134.12	8.20
September	42.62	1.92	57.16	3.32	135.51	5.59
October	44.98	3.88	58.93	5.29	135.96	7.52
November	45.69	8.14	59.58	9.67	135.67	8.41
December	45.81	2.55	61.77	3.73	137.32	2.45

Limnological Conditions of the Sources of the City Water Supply : (a) Satyamoorthi Sagar in 1955
(Results expressed in parts per 1,00,000)

Description	— Jan.	26-2-55 Feb.	30-3-55 March	— April	31-5-55 May	— June	19-7-55 July	27-8-55 Aug.	28-9-55 Sep.	31-10-55 Oct.	26-11-55 Nov.	— Dec.
A. Physical Conditions :												
Time (P. M.)	...	2.00	2.45		3.00		2.30	2.00	2.30	1.30	2.15	
Depth in feet (above mean Sea-level)	...	135.7	...		133.7		132.5	135.7	135.1	136.0	135.4	
Colour	...	S.Y. 32	S.G. 33		S.G. 33		S.W. 30.5	S.Y. 31.0	Y 34.0	W 32.8	S.Y. 27.5	
Temperature (°c)	...											
B. Chemical Conditions :												
Total Solids	...	22.4	23.2		38.8		28.8	...	25.6	20.0	21.6	
Alkalinity to { Phenolphthalein		1.3	1.8		—0.4		1.1	0.3	0.5	—0.4	1.0	
{ Methyl Orange												
P. H.	...	11.0	10.2		11.4		13.8	13.0	13.1	16.5	16.8	
Dissolved oxygen (cc/L)	...	8.8	8.4		8.1		8.5	8.4	8.2	8.5	8.5	
% Saturation	...	5.6	4.9		5.7		5.7	3.85	5.67	...	5.19	
Chlorides	
Oxygen absorbed (Tidy's)	...	3.7	4.1		4.6		5.2	4.9	4.8	4.4	4.8	
Ammoniacal Nitrogen	...	0.180	0.089		0.260		0.355	0.341	0.217	0.184	0.205	
Albuminoid Nitrogen	...	0.019	0.006		0.011		nil	0.016	Trace	nil	0.002	
Nitrous Nitrogen	...	0.020	0.008		0.060		0.056	0.036	0.060	0.008	0.032	
Nitric Nitrogen	...	<0.001	<0.001		<0.001		<0.001	<0.001	nil	<0.001	nil	Sample not collected
Phosphates (Po ₄)	...	nil	nil		nil		nil	nil	M. Tr.	nil	nil	
Silicates (Sio ₂)	...	0.001	0.002		0.001		0.002	0.001	0.001	0.001	0.001	
Total hardness	...	0.1	0.2		0.2		0.4	0.3	0.4	0.3	0.4	
Calcium hardness	...	8.0	6.4		6.0		6.0	6.2	8.4	9.8	9.4	
Magnesium hardness		2.2	2.4	...	4.4	4.4	
Iron	Trace		...		3.8	3.8	...	5.4	5.0	
B. Coli present in ? c.c. & upds		nil			nil		0.02	nil	nil	0.02	0.008	
C. Bacteriological Conditions :												
B. Coli present in ? c.c. & upds		1.0	1.0		1.0		1.0	1.0	1.0	5.0	1.0	

S.Y.—Slightly Yellowish ; Y—Yellowish ; W—Whitish ; S.W.—Slightly Whitish ; S.G.—Slightly Greenish.

Limnological Conditions of the Sources of the City Water Supply: (b) Sholavaram Reservoir 1955.

(Results expressed in parts per 1,00,000)

Description	— Jan.	26-2-55 Feb.	30-3-55 March	— April	31-5-55 May	— June	19-7-55 July	27-8-55 Aug.	28-9-55 Sep.	31-10-55 Oct.	26-11-55 Nov.	— Dec.
A. Physical Conditions :												
Time (A.M.)	...	11-30	4-40 P.M.		11-35		11-20	11-0	11-15	11-0	11-15	
Depth in feet (above mean Sea level)	...	61.60 S. Y.	S. G. 31.0		58.35 S. Y.		58.06 S. Y.	57.27 Y.	57.94 S. Y.	60.12 C.	59.05 S. Y.	
Colour	...	31.0			32.0		30.5	30.0	33.0	30.2	28.5	
Temperature (°C).	...											
B. Chemical Conditions :												
Total Solids	...	24.0 -0.4	22.0 0.7		24.0 -0.1		27.6 1.0	28.0 0.6	24.4 1.0	24.4 0.9	19.6 0.9	
Alkalinity to { Phenolphthalein { Methyl Orange	...	10.7	10.4		10.7		11.8	9.8	11.8	14.0	14.2	
P. H.	...	8.4	8.4		7.9		8.4	8.4	8.4	8.5	8.5	
Dissolved oxygen (CC/L)	...	5.95	5.6		6.2		5.5	—	5.53	—	7.61	
% Saturation	
Chlorides	...	4.0	4.1		4.3		5.2	4.4	4.9	5.0	5.2	
Oxygen absorbed (Tidy's)	...	0.181	0.185		0.240		0.288	0.287	0.196	0.201	0.200	
Ammoniacal Nitrogen	...	0.019	Nil		0.004		0.004	0.014	Nil	Nil	0.002	
Albuminoid Nitrogen	...	0.020	0.019		0.060		0.060	0.048	0.060	0.010	0.040	
Nitrous Nitrogen	...	<0.001	<0.001		<0.001		<0.001	<0.001	Nil	0.001	Nil	
Nitric Nitrogen	...	Nil	Nil		Nil		Nil	Nil	Tr.	Nil	Nil	
Phosphates (PO ₄)	...	0.001	<0.001		0.001		0.002	0.001	0.001	0.001	0.001	
Silicates (SiO ₂)	...	0.1	0.2		0.2		0.4	0.3	0.4	0.3	0.4	
Total hardness	...	12.0	9.6		8.0		8.0	7.4	8.2	9.2	9.0	
Calcium hardness	...	—	—		—		3.6	3.6	—	4.4	4.8	
Magnesium hardness	...	—	—		—		4.4	3.8	—	4.8	4.2	
Iron	...	Nil	Trace		Nil		0.010	0.020	0.010	Nil	0.010	
C. Bactriological Conditions :												
B Coli present in ? c.c. & upds.		20.0	5.0		1.0		1.0	1.0	1.0	5.0	1.0	

Sample not collected

Sample not collected

Sample not collected

Sample not collected

S. Y.—Slightly Yellowish. S. G.—Slightly Greenish. Y.—Yellowish. C.—Colourless.

WATER ANALYSIS

STATEMENT No. V.

Limnological Conditions of the Sources of the City Water Supply: (c) Red Hills Reservoir 1955
(Results expressed in parts per 1,00,000)

Description	1955											
	Jan.	26-2-55 Feb.	30-3-55 March	April	31-5-55 May	June	19-7-55 July	27-8-55 Aug.	28-9-55 Sep.	31-10-55 Oct.	26-11-55 Nov.	— Dec.
<i>A. Physical Conditions:</i>												
Time (A M.)	...	10.35	5.0 P.M		11.0		10.20	10.0	10.15	10.30	10.45	
Depth in feet (above mean Sea-level)	...	45.38 W	... S.Y. 31.0		42.58 S.Y. 31.0		40.40 C 30.0	41.30 S.Y. 29.0	43.51 S.Y. 33.0	45.57 S.G. 30.0	45.86 S.G. 27.5	
Colour	...	30.0										
Temperature (°c)	...											
<i>B. Chemical Conditions:</i>												
Total Solids	...	20.0 -0.5	21.6 0.5		36.0 -0.2		18.8 1.0	...	28.4 0.7	14.8 0.4	18.0 0.7	
Alkalinity { Phenolphthalein	...											
Methyl Orange	...											
P. H.	...											
Dissolved Oxygen (cc/L)	...	9.5 8.4 5.25	9.4 8.4 5.6		9.5 7.8 4.6		9.9 8.4 5.4	9.3 8.4 ...	9.7 8.4 5.53	12.5 8.4 ...	11.3 8.4 6.22	
% Saturation	
Chlorides	...	3.1	3.3		3.8		4.2	4.0	4.5	4.6	5.0	
Oxygen absorbed (Tidy's)	...	0.185	0.197		0.247		0.288	0.226	0.224	0.216	0.220	
Ammoniacal Nitrogen	...	0.028	nil		0.003		0.002	0.002	0.002	0.003	0.002	
Albuminoid Nitrogen	...	0.020	0.016		0.064		0.060	0.064	0.080	0.019	0.040	
Nitrous Nitrogen	...	<0.001	<0.001		<0.001		<0.001	<0.001	nil	<0.001	nil	Sample not collected
Nitric Nitrogen	...	nil	nil		nil		nil	nil	M. Tr.	nil	nil	
Phospates (Po ₄)	...	0.001	0.001		0.001		0.002	0.001	0.001	0.001	0.001	
Silicates (SiO ₂)	...	0.1	0.2		0.2		0.4	0.3	0.4	0.3	0.4	
Total hardness	...	9.0	8.4		7.8		8.0	7.4	8.2	8.6	9.4	
Magnesium hardness		4.4	3.8	...	4.8	5.8	
Calcium hardness		3.6	3.6	...	3.8	3.6	
Iron	...	0.010	Trace		nil		0.010	M. Tr.	Trace	nil	0.005	
<i>C. Bacteriological Conditions:</i>												
B. Coli present in? c.c. & upds		60.0	5.0		5.0		20.0	5.0	1.0	10.0	1.0	

W—Whitish ; S, Y.—Slightly Yellowish ; C—Colourless ; S, G.—Slightly Greenish,

Physico-Chemical conditions of the Chlorinated Raw Water at the Kilpauk end of the Raw Water Conduits.
Weekly Averages for 1955. (Results expressed in parts per 100,000)

APPENDIX

Description	January					February					March					April				
	8	15	20	29	31	5	12	19	28		5	12	19	26	31	2	9	16	22	30
	Y	Y	Y	Y	Y	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.
Colour	...	Y	Y	Y	Y	...	S.Y.	S.Y.	S.Y.	...	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.
Ammoniacal N.	...	0.002	0.002	0.002	Nil	...	0.003	Tr.	Tr.	...	Nil	Nil	0.002	0.002	0.003	...	0.004	0.002	0.008	0.003
Albuminoid "	...	0.040	0.040	0.019	0.040	...	0.030	0.068	0.060	...	0.016	0.003	0.048	0.022	0.019	...	0.068	0.064	0.040	0.068
Nitrous "	...	<0.001	<0.001	<0.001	<0.001	...	0.001	<0.001	<0.001	...	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitric "	...	Nil	M.Tr	M.Tr	M.Tr	...	Nil	Nil	Nil	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	M.Tr	Nil	M.Tr
Chlorides	...	3.2	3.2	3.3	3.0	...	3.0	3.2	3.7	...	3.3	3.3	3.6	3.8	3.6	3.7	3.6	3.6	3.5	3.1
Oxygen absorbed (Tidy's)	0.187	0.194	0.170	0.192	0.151	0.141	0.161	0.163	0.151	...	0.147	0.145	0.134	0.138	0.173	0.188	0.171	0.170	0.182	0.192
P. H.	...	8.3	8.3	8.4	8.2	...	8.3	8.4	8.4	...	8.3	8.4	8.3	8.5	8.5	...	8.4	8.4	8.4	...
Alkaliinty to { Phenolph- thalein Methyl Orange	0.4	0.6	0.5	0.6	...	0.4	0.6	0.4	0.4	...	-0.5	-0.4	-0.4	-0.4	-0.5	0.6	0.5	0.5	0.5	0.5
	10.0	10.2	10.5	10.3	...	10.6	9.8	10.0	9.7	...	10.1	9.6	10.5	9.5	9.6	9.9	10.0	9.6	10.0	9.6
Total hardness	...	12.6	12.3	15.2	13.0	...	13.4	11.2	12.9	...	9.2	11.1	13.0	12.8	12.6	6.6	10.8	10.2	9.0	12.0
Total Solids	...	20.4	24.8	...	17.2	...	22.0	18.8	21.2	...	20.0	22.4	22.0	20.0	...	...	...	20.0	22.0	24.0
Phosphates (Po ₄)	...	0.001	0.002	0.001	Tr.	...	0.001	0.002	0.001	...	0.001	0.001	0.001	0.001	0.001	...	0.002	0.001	0.001	0.001
Silicates (Sio ₂)	...	0.2	0.4	0.2	0.2	...	0.3	0.4	0.4	...	0.3	0.3	0.3	0.2	0.2	...	0.3	0.4	0.3	0.6
Iron	...	0.005	0.002	0.005	Tr.	...	0.001	Tr.	0.001	...	Nil	Nil	Nil	Tr.	Tr.	...	Nil	0.003	0.00	0.001

Y—Yellowish ; S.Y.—Slightly Yellowish ; M. Tr.—Minute Trace ; Tr.—Trace.

Physico-Chemical conditions of the Chlorinated Raw Water at the Kilpauk end of the Raw Water Conduits.
Weekly Averages for 1955. (Results expressed in parts per 100,000).

Description	May					June					July					August					
	II		III	IV	V	I		II	III	IV	V	I		II	III	IV	V				
	I																				
Colour	...	S.Y.	S.Y.	S.Y.	S.Y.	Y.	Y.	S.Y.	Y.	Y.	Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.			
Ammonical N	...	0.002	0.002	0.006	Nil	...	Nil	Tr.	0.002	Nil	0.003	...	Nil	M.Tr.	0.003	0.007	0.004	0.003	Nil	Nil	0.004
Albuminoid N	...	0.048	0.019	0.032	0.048	...	0.064	0.032	0.048	0.032	0.040	...	0.044	0.056	0.056	0.072	0.028	0.056	0.056	0.056	0.040
Nitrous	...	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00	<0.001	...	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitric	...	M.Tr.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Chlorides	...	3.3	3.5	3.7	3.6	3.5	3.5	3.8	3.7	3.9	4.0	4.0	4.0	4.4	4.2	4.6	4.9	4.0	4.2	4.1	4.3
Oxygen absorbed (Tidy's)	...	0.177	0.173	0.140	0.164	0.183	0.228	0.220	0.222	0.225	0.201	0.199	0.242	0.222	0.237	0.234	0.230	0.208	0.222	0.193	0.222
P. H.	8.4	8.3	8.4	8.4	8.5	8.4	8.4	8.4	8.5	...	8.5	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Alkali- nity to {	Phenolphthalein.	0.5	0.6	0.5	...	0.3	-0.4	-0.2	-0.2	-0.2	-0.2	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.2	-0.2	-0.3
Methyl orange		9.4	8.0	9.4	...	9.2	9.0	9.2	9.3	9.3	9.2	9.2	9.5	9.7	9.8	9.4	9.1	9.4	9.4	8.9	9.4
Total hardness	...	8.2	7.9	8.0	8.1	8.6	9.6	7.8	7.9	7.9	7.9	7.8	8.0	7.6	8.0	8.2	8.5	7.8	8.0	7.9	8.0
Total Solids	...	21.2	...	18.4	27.2	...	26.0	31.2	26.8	24.0	22.4	...	24.8	27.2	23.6	26.8	24.4	22.0	14.0	12.4	...
Phosphates (PO ₄)	...	0.001	0.003	0.001	...	...	0.001	0.001	0.001	0.001	0.001	...	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001
Silicates (SiO ₂)	...	0.4	0.3	0.3	...	...	0.2	0.4	0.2	0.3	0.2	...	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Iron	...	0.005	0.020	0.005	0.015	...	Nil	Nil	0.005	0.005	0.010	...	M.Tr.	M.Tr.	0.005	0.010	M.Tr.	...	M.Tr.	Tr.	...

Physico-Chemical conditions of the Chlorinated Raw Water at the Kilpauk end of the Raw Water Conduits.
Weekly averages for 1955. (Results expressed in parts per 100,000.)

Description	September					October					November					December				
	I		II		III		IV		V		I		II		III		IV		V	
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Colour	...	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.
Ammoniacal N.	...	0.002	0.004	0.004	0.003	0.003	0.004	Nil	Nil	0.002	0.003	0.003	0.002	0.002	Nil	...	Tr.	0.002	Nil	0.002
Albuminoid "	...	0.040	0.080	0.056	0.040	0.072	0.056	0.008	0.056	0.053	0.040	0.064	0.040	0.032	0.032	...	0.032	0.032	0.060	0.056
Nitrous "	...	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	...	<0.001	<0.001	<0.001	Nil
Nitric "	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	M.Tr.	Nil	Nil	...	Nil	Nil	Nil	Nil
Chlorides	...	4.5	4.1	4.6	4.7	4.8	4.9	4.9	5.0	5.3	5.0	5.0	5.1	5.2	5.1	5.5	5.2	5.1	5.1	5.4
Oxygen absorbed (Tidys)	0.228	0.197	0.212	0.242	0.176	0.164	0.169	0.145	0.171	0.162	0.177	0.208	0.196	0.186	0.184	0.191	0.191	0.174	0.184	0.186
P. H.	...	8.4	8.4	8.4	8.4	8.4	8.3	8.4	8.4	8.4	8.5	8.2	8.4	8.4	8.4	8.4	8.2	8.3	8.2	8.3
Alkalinity { Phenolphtha- to lein Methyl Orange.	0.5 9.2	0.5 9.2	0.1 9.5	0.3 9.9	0.3 9.9	0.3 10.0	0.2 10.1	0.2 8.1	0.5 10.6	0.3 9.7	0.2 11.5	0.2 11.6	0.4 11.7	0.2 11.5	0.5 11.7	0.2 11.1	-0.1 11.1	0.1 11.1	Nil 11.1	0.3 11.1
Total hardness	...	8.4	9.1	8.5	8.2	7.6	8.4	9.2	7.8	8.2	8.6	8.4	8.6	8.3	9.2	9.0	8.3	8.2	8.4	8.2
Total Solids	...	30.4	12.0	16.4	21.2	14.4	10.4	24.0	14.0	15.7	21.8	24.4	26.0	16.8	25.8	20.8	16.2	23.0	20.2	23.1
Phosphates (Po ₄)	...	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	Tr.	0.001	...	0.001	0.001	0.001	Nil
Silicates (Sio ₂)	...	0.4	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	...	0.2	0.2	0.2	0.3
Iron	...	0.005	0.005	0.010	0.005	Nil	M.Tr.	M.Tr.	M.Tr.	M.Tr.	0.010	0.005	0.005	Tr.	0.005	...	0.005	0.005	Nil	Tr.

Some important Physical, Chemical and Bacteriological Results of Chlorinated Raw Water in 1955.
(Results expressed in parts per 1,00,000)

h-14

Months 1955	No. of Samples	Colour	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Chlorides	Oxygen Absorbed (Tidy's)	Alkalinity to		P. H.	Total hardness	PO ₄	SiO ₂	Fe	Total Solids	<div>B. Coll %</div>
									P.T.H.	M.O.							
January	20	Y.	0.002	0.035	< 0.001	M. Tr.	3.2	0.179	-0.5	10.3	8.3	13.3	0.001	0.3	0.003	20.8	0
February	24	S. Y.	Trace	0.054	< 0.001	Nil	3.3	0.154	-0.4	10.0	8.3	12.5	0.001	0.4	0.001	19.9	12
March	25	S. Y.	0.001	0.021	< 0.001	Nil	3.5	0.147	-0.4	9.9	8.4	11.7	0.001	0.3	Nil	21.1	16
April	23	S. Y.	0.014	0.060	< 0.001	Nil	3.5	0.180	-0.5	9.8	8.4	9.7	0.001	0.4	0.001	22.0	21
May	24	S. Y.	0.003	0.037	< 0.001	Nil	3.5	0.167	0.2	9.0	8.4	8.2	0.001	0.3	0.005	22.3	24
June	25	S. Y.	0.002	0.043	< 0.001	Nil	3.7	0.219	-0.2	9.2	8.4	8.2	0.001	0.2	0.007	26.0	92
July	23	Y.	0.005	0.057	< 0.001	Nil	4.2	0.227	0.3	9.5	8.4	7.9	0.001	0.3	0.007	25.6	68
August	24	S. Y.	0.002	0.047	< 0.001	Nil	4.3	0.219	-0.3	9.2	8.4	8.0	0.001	0.3	M. Tr.	18.2	75
September	23	S. Y.	0.003	0.054	< 0.001	Nil	4.5	0.211	0.3	9.5	8.4	8.5	0.001	0.3	0.006	20.0	82
October	20	Y.	0.002	0.053	< 0.001	Nil	5.3	0.162	0.2	9.7	8.4	8.2	0.001	0.2	M. Tr.	15.7	70
November	24	C.	0.002	0.041	< 0.001	Nil	5.1	0.190	0.3	11.6	8.4	8.6	0.001	0.2	0.005	22.9	42
December	24	C.	0.001	0.045	< 0.001	Nil	5.2	0.186	0.1	11.1	8.3	8.4	0.001	0.2	0.002	20.6	45

P.T.H.—Phenolphthalein, M.O.—Methyl Orange.

Some important Physical, Chemical and Bacteriological Results of Chlorinated Filtrates from Beds in 1955.
(Results expressed in parts per 1,00,000)

Months 1955	No. of Samples	Colour	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Chlorides	Oxygen absorbed (Tidys)	Alkalinity to		P.H.	Total hardness	PO ₄	SiO ₂	Fe	No. of Samples	B. Coll—60c. %
									P.T.H.	M.O.							
January	20	S.Y.	0.003	0.025	<0.001	M. Tr.	3.2	0.163	-0.5	10.3	7.8	12.6	0.001	0.2	0.003	20	0
February	24	S.Y.	0.008	0.052	<0.001	Nil	3.2	0.135	-0.5	9.9	7.9	11.1	0.001	0.3	0.001	24	12
March	25	S.Y.	0.007	0.019	<0.001	Nil	3.5	0.130	-0.5	10.0	7.7	10.5	0.001	0.3	Tr.	25	12
April	23	S.Y.	0.012	0.057	<0.001	Nil	3.6	0.175	-0.6	9.8	8.0	9.6	0.001	0.4	Tr.	23	13
May	24	Y.	0.010	0.034	<0.001	Nil	3.5	0.151	0.2	9.6	8.0	8.0	0.002	0.3	0.007	24	4
June	25	S.Y.	0.008	0.034	0.001	Nil	3.8	0.193	-0.3	9.6	8.2	8.1	0.004	0.3	0.010	25	32
July	23	C	0.012	0.054	0.001	Nil	4.3	0.211	-0.3	9.5	8.2	7.8	0.002	0.3	0.002	23	8
August	24	C	0.016	0.048	0.001	Nil	4.2	0.203	0.2	9.4	8.2	7.9	0.001	0.3	M. Tr.	24	13
September	23	C	0.012	0.049	0.001	Nil	4.4	0.206	-0.3	10.0	8.2	8.2	0.001	0.3	0.006	23	8
October	20	S.Y.	0.009	0.054	<0.001	Nil	4.7	0.147	-0.3	9.4	8.2	8.0	0.001	0.2	0.005	20	5
November	24	C	0.002	0.042	0.001	M. Tr.	4.9	0.178	0.3	11.5	8.2	8.8	0.001	0.2	0.003	24	8
December	24	C	0.001	0.045	<0.001	Nil	5.1	0.180	-0.1	11.1	8.2	8.2	0.001	0.2	0.001	24	5

APPENDIX

Some Important Physical, Chemical and Bacteriological Results of the Test Tap Water at K. P. S. in 1955
(Results expressed in parts per 1,00,000)

Months 1955	No. of samples	Colour	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Chlorides	Oxygen absorbed (Tidy's)	Alkalinity to		P. H.	Total hardness	PO ₄	SiO ₂	Fe	Total Solids	B. Coll -60 C. C. %
									P.T.H.	M.O.							
January	20	S. Y.	0.003	0.028	< 0.001	M. Tr.	3.3	0.159	— 0.5	9.5	7.7	13.3	0.001	0.2	0.003	18.3	35
February	24	S. Y.	0.028	0.050	0.001	Nil	3.4	0.122	— 0.5	9.5	7.8	11.9	0.002	0.3	0.001	19.0	75
March	25	S. Y.	0.003	0.019	< 0.001	Nil	3.8	0.131	— 0.5	9.9	7.7	11.3	0.001	0.3	Nil	20.5	56
April	23	S. Y.	0.012	0.058	< 0.001	M. Tr.	3.7	0.174	— 0.7	9.5	7.8	10.5	0.001	0.4	0.001	21.6	21
May	24	S. Y.	0.008	0.033	< 0.001	Nil	3.8	0.145	— 0.5	9.2	8.0	8.1	0.001	0.3	0.007	22.3	48
June	25	S. Y.	0.009	0.036	< 0.001	Nil	3.9	0.196	— 0.3	9.2	7.9	8.0	0.004	0.3	0.008	25.5	96
July	23	S. Y.	0.008	0.052	< 0.001	Nil	4.2	0.190	— 0.3	8.8	8.0	7.8	0.002	0.3	0.004	24.9	72
August	24	S. Y.	0.005	0.047	< 0.001	Nil	4.2	0.193	— 0.3	9.4	8.2	8.0	0.001	0.3	M. Tr.	20.1	84
September	23	S. Y.	0.009	0.043	0.001	Nil	4.5	0.203	— 0.4	10.0	8.0	8.3	0.001	0.3	0.005	27.1	66
October	20	S. Y.	0.004	0.046	< 0.001	Nil	5.0	0.132	— 0.4	9.2	8.0	7.9	0.001	0.2	M. Tr.	18.9	70
November	24	S. Y.	0.002	0.040	0.001	M. Tr.	5.2	0.157	— 0.4	11.2	7.9	8.5	0.001	0.2	0.003	26.1	79
December	24	S. Y.	0.001	0.041	< 0.001	Nil	5.1	0.164	— 0.3	10.7	7.2	8.2	0.001	0.2	0.002	20.7	79

Chlorination Data for 1955—Furnished by the Water Works Department.

Months	Quantity of water filtered in million gallons per day.			Dose of Chlorine applied to Raw water in P.P.M.			Dose of Chlorine applied to filtered water in P.P.M.			Lbs. of Chlorine used per month for pre-chlorina- tion of R.W.	Lbs. of Chlorine used per month for post chlorina- tion of F.W.	Total lbs. of Chlorine used per month	Cost of Chlorine per lb.	Total cost of Chlorine	Total cost of Chlorine
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean						
January ...	29.66	22.66	25.40	1.27	0.82	1.03	2.27	1.13	1.73	8345	14,018	22,363	Rs. A. P. 0 4 0	Rs. As. Ps. 5590 12 0	Total cost of Chlorine Rs. ... Sales Tax Rs. ... Total Rs. ...
February ...	27.66	24.66	26.50	0.87	0.55	0.73	1.55	1.34	1.44	5491	10,752	16,243	do	4060 12 0	
March ...	28.00	26.16	23.64	0.73	0.56	0.68	1.47	1.20	1.36	5666	11,389	17,055	do	4263 12 0	
April ...	29.32	24.00	27.55	0.72	0.52	0.61	1.40	1.14	1.29	5005	10,700	15,705	do	3926 4 0	
May ...	30.00	27.10	28.65	1.01	0.57	0.90	1.77	1.31	1.54	8206	13,832	22,038	do	5509 8 0	
June ...	28.97	26.71	27.30	1.08	0.90	1.02	2.05	1.61	1.85	8460	15,317	23,777	do	5944 4 0	
July ...	28.32	25.82	26.90	1.08	0.96	1.03	2.17	1.05	2.00	8698	17,060	25,758	do	6439 8 0	
August ...	29.00	23.33	27.62	1.08	0.69	0.97	2.12	1.38	1.82	8376	15,685	24,061	do	6015 4 0	
September ...	28.78	25.99	27.93	1.08	0.74	0.95	1.92	1.53	1.68	8011	14,155	22,166	do	5541 8 0	
October ...	29.66	26.82	28.30	1.05	0.74	0.92	1.99	1.60	1.78	8094	15,700	23,794	do	5948 8 0	
November ...	29.00	26.32	27.66	0.90	0.61	0.76	2.09	1.52	1.81	6102	15,006	21,108	do	5277 0 0	
December ...	29.32	26.00	28.11	0.92	0.70	0.77	2.16	1.60	1.87	6807	16,466	23,273	do	5818 4 0	
														64,335 4 0	
														64,335 4 0	
														65,340 7 9	
														64,335 4 0	
														1,005 3 9	
														Sales Tax Rs. ...	
														Total cost of Chlorine Rs. ...	

Kortalayar River System—City Distribution System—Results of Chemical and Bacteriological Examination in 1955
(Results expressed in parts per 100,000)

Months 1955	High Pressure Areas (Near Head Works)										Low Pressure Areas (Outlying divisions)															
	No. of samples	Smell	Amm. N.	Alb. N.	Nitrous N.	Nitric N.	Chlorides	Oxygen absorbed (Tidy's)	P.H.	Total hardness	Total Solids	Iron	B. Coli—60 CC%	No. of Samples	Smell	Amm. N.	Alb. N.	Nitrous N.	Nitric N.	Chlorides	Oxygen absorbed (Tidy's)	P.H.	Total hardness	Total Solids	Iron	B.Coli—60CC%
January	10	Nil	0.004	0.019	<0.001	M. Tr.	3.3	0.171	7.7	10.1	20.8	0.012	70	67	Nil	0.003	0.019	<0.001	M. Tr.	3.3	0.157	7.6	11.0	20.0	0.012	3
February	10	„	0.002	0.025	<0.001	Nil	3.3	0.159	7.7	13.1	20.0	0.002	40	143	„	0.006	0.048	<0.001	Nil	3.3	0.134	7.8	12.1	19.3	0.002	23
March	20	„	—	—	<0.001	Trace	3.7	0.124	7.8	15.0	22.0	0.013	83	143	„	0.001	0.016	<0.001	Tr.	3.6	0.131	7.8	13.0	21.3	0.010	28
April	18	„	0.004	0.036	<0.001	M. Tr.	3.5	0.143	7.9	10.3	20.0	0.021	16	36	„	—	—	<0.001	M. Tr.	4.2	0.176	7.8	10.5	37.1	0.006	0
May	75	„	0.003	0.051	<0.001	M. Tr.	3.8	0.141	7.9	8.0	24.2	0.017	12	10	„	0.002	0.010	0.001	M. Tr.	3.7	0.152	8.0	8.6	17.6	0.007	50
June	10	„	0.002	0.017	<0.001	M. Tr.	3.9	0.220	7.8	8.3	31.2	0.01	0	100	„	0.004	0.054	<0.001	Nil	3.9	0.199	7.3	8.0	28.9	0.022	4
July	10	„	—	—	0.001	M. Tr.	4.5	0.220	7.8	7.9	23.6	0.005	80	87	„	0.003	0.036	0.001	M. Tr.	4.4	0.197	7.9	7.8	21.6	0.008	50
August	20	„	—	—	<0.001	M. Tr.	4.6	0.179	7.9	8.2	22.2	M. Tr.	80	114	„	0.003	0.051	<0.001	M. Tr.	4.3	0.197	7.9	7.9	21.3	0.006	41
September	20	„	—	—	0.001	M. Tr.	4.4	0.200	7.7	8.8	16.4	0.012	40	150	„	0.003	0.046	0.001	M. Tr.	4.6	0.196	7.6	8.6	25.0	0.011	25
October	7	„	—	—	<0.001	Nil	4.7	0.145	7.8	8.0	—	M Tr.	71	76	„	0.005	0.124	<0.001	Nil	5.1	0.124	7.9	8.1	21.8	0.005	14
November	10	„	Nil	0.030	<0.001	M. Tr.	5.3	0.153	7.8	8.3	—	0.006	20	108	„	0.001	0.026	0.001	M. Tr.	5.2	0.153	7.8	8.6	20.8	0.011	14
December	18	„	0.003	0.040	<0.001	M. Tr.	5.2	0.165	7.8	8.2	25.9	0.009	18	81	„	Tr.	0.019	Tr.	M. Tr.	5.3	0.166	7.7	8.5	16.2	0.009	16

Kortalayar River System—Booster Area—Results of Chemical and Bacteriological Examination.

(Results expressed in parts per 100,000)

Months 1955	No. of Samples	Smell	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen Absorbed (Tidy's)	P.H.	Total Hardness	Total Solids	Iron	Chlorides	B. Coli —60 c.c %
January	6	Nil	...	...	<0.001	M.Tr.	0.160	7.8	12.3	21.4	0.030	3.6	0
February	12	"	Tr.	0.030	Nil	<0.001	0.129	7.7	14.3	22.2	0.008	3.3	50
March	12	"	Nil	0.014	<0.001	Tr.	0.139	7.7	14.0	21.0	0.010	4.0	40
April	...	"	...	...	...	Sample not collected	...	...	...	...	...	...	...
May	10	"	Nil	0.030	<0.001	M.Tr.	0.124	7.8	8.2	20.0	0.008	3.7	10
June	4	"	0.004	0.025	<0.001	"	0.172	7.7	8.4	25.2	0.02	3.9	25
July	6	"	0.003	0.019	<0.001	Nil	0.195	7.9	7.7	18.0	0.015	4.5	33
August	10	"	...	...	<0.001	M.Tr.	0.224	8.0	8.9	18.8	0.01	4.5	40
September	6	"	0.002	0.048	<0.001	"	0.192	7.8	8.5	28.2	0.011	4.4	0
October	5	"	...	...	0.001	Nil	0.123	7.7	8.4	...	0.005	4.8	0
November	10	"	0.002	0.034	0.001	M.Tr.	0.145	7.7	9.0	23.4	0.012	5.2	40
December	6	"	0.001	0.015	<0.001	"	0.169	7.9	8.5	20.4	0.010	5.3	34

APPENDIX

Results of Chemical and Bacteriological Examination of the Infiltration—Gallery
Well at Saidapet in 1955 (Results expressed in parts per 1,00,000)

Months	Jan.	Feb.	March	April	May	June	July	August	Sep.	October	Nov.	Dec.
Colour	C & C	C & C	C & C	C & C	Sample not Collected			C & C	C & C	C & C	C & C	C & C
Am—N	Nil	0.010	Nil	0.003				0.003	0.002	0.002	0.002	Nil
Alb—N	Nil	0.010	Nil	0.004				0.002	0.004	Nil	0.032	Nil
NO ₂ —N	<0.001	<0.001	<0.001	<0.001				<0.001	0.005	<0.001	<0.001	Nil
NO ₃ —N	Present	Present	Present	Present				Present	Present	Present	Present	Present
Oxy. Abs.	0.024	0.015	0.036	0.032				0.061	0.086	0.032	0.060	0.112
P.T.H.—Alkalinity	—0.9	—1.8	—2.0	—				—1.2	—0.6	—1.2	—1.2	+1.0
MO Alkalinity	10.4	9.9	11.9	—				13.8	19.4	6.5	13.6	10.4
P. H.	7.5	7.2	7.7	7.5				7.2	7.6	6.8	7.8	7.2
Chlorides	10.0	12.0	11.5	16.0				15.0	18.0	14.0	18.0	13.0
Total Hardness	23.6	19.0	23.0	22.0				20.0	26.0	28.0	20.0	15.0
Total Solids	40.0	35.2	44.6	64.0				46.8	69.2	23.0	59.6	56.0
Iron	Nil	Tr.	Nil	Nil				M. Tr.	0.02	0.025	M. Tr.	0.02
B. Coli present in ? C. C. S. and upwards	20	60	—60	—60				—60	—60	—50	—60	—60

Infiltration Gallery Systems—Distribution System—Results of Chemical and Bacteriological Examination
(Results Expressed in parts per 1,00,000)

Sembiam															Saidape:											
Months	No. of Samples	Smell	Ammoniacal Nitrogen	Albuminoid Nitrogen	No ₂ —Nitrogen	No ₃ —Nitrogen	Chlorides	Oxygen Absorbed	P.H.	Total Hardness	Total Solids	Iron	B.Coli —60 c.c. %	Number of Samples	Smell	Ammoniacal Nitrogen	Albuminoid Nitrogen	No ₂ —Nitrogen	No ₃ —Nitrogen	Chlorides	Oxygen Absorbed	P. H.	Total Hardness	Total Solids	Iron	B.Coli —60 c.c. %
January	8	Nil	Nil	Nil	<0.001	Pr.	14.0	0.020	7.6	38.0	54.0	0.022	100%	6	Nil	Tr.	Tr.	<0.001	Pr.	10.7	0.019	8.0	20.0	32.0	0.012	100
February	10	Nil	Nil	Nil	0.010	Pr.	13.0	0.037	7.2	18.0	40.0	0.020	70%	7	Nil	Tr.	Tr.	<0.001	Pr.	12.2	0.027	7.9	44.5	39.6	0.002	57
March	20	Nil	0.001	0.001	<0.001	Tr.	13.8	0.034	7.6	25.0	38.6	0.036	100%	16	Nil	Nil	0.002	0.002	Pr.	12.0	0.026	7.9	30.0	48.0	0.002	75
April	8	Nil	0.002	0.002	<0.001	M. Tr.	15.2	0.059	7.8	19.7	42.0	0.013	100%	6	Nil	0.002	0.002	<0.001	Pr.	22.00	0.054	7.3	28.0	56.0	0.002	100
May	...				Sample				not				Collected													
June	12	Nil	0.002	0.002	<0.001	Nil	16.3	0.090	7.9	21.2	58.0	0.019	25%	8	Nil	Tr.	Nil	0.001	Pr.	17.0	0.088	8.1	24.0	28.4	M. Tr.	37
July	16	Nil	.004	.004	<0.001	M. Tr.	19.9	0.080	7.9	18.6	47.0	0.020	69%	8	Nil	0.002	0.002	<0.001	Pr.	21.2	0.049	8.0	23.0	59.2	0.019	100
August	6	Nil	0.018	0.003	Tr.	Tr.	17.6	0.122	7.6	19.0	46.8	0.03	100%	6	Nil	Tr.	Nil	Tr.	Nil	19.0	0.061	7.8	23.0	62.4	Tr.	100
September	16	Nil	0.002	0.008	<0.001	Tr.	15.5	0.074	7.8	20.6	39.6	0.022	100%	6	Nil	0.002	0.004	0.001	Pr.	17.3	0.076	8.0	23.7	62.0	0.015	100
October	8	Nil	—	—	<0.001	Nil	15.7	.088	7.9	19.0	50.4	—	100%	6	Nil	0.002	0.002	<0.001	Pr.	17.3	0.028	7.7	22.3	58.0	0.001	100
November	8	Nil	Nil	Tr.	<0.001	Nil	17.5	0.048	7.3	18.7	50.8	.009	75%	6	Nil	0.002	0.040	<0.001	Pr.	14.0	0.055	7.7	19.0	62.8	0.014	100
December	8	Nil	Nil	Nil	Nil	M. Tr.	14.0	0.036	7.7	23.7	51.2	0.037	100%	6	Nil	Nil	Nil	Tr.	Nil	12.0	0.091	7.7	15.2	59.2	0.02	100

APPENDIX

Results of Chemical and Bacteriological Examination of the Shallow Wells used as Sources of Water Supply to Outlying Areas in 1955.
(Results expressed in parts per 100,000)

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1955		Richard's Park well (Saidapet)												United India Colony Well (Kodambakkam)																				
Months	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.										
Colour	C. & C.	C. & C.	C.&C.	C. & C.	Sample not collected												C.&C.	C. & C.	C. & C.	C. & H.	C.&H.	Y.&H.	C.&C.	C.&C.	Sample not collected				C.&C.	C.&C.				
Am—N	Nil	Tr.	Nil	0.002	0.003	0.003	0.002	0.003	0.008	0.004	Nil	Tr.	0.080	0.032	0.116	Sample not collected												0.136	0.20	0.160	0.124	0.012	0.048	0.032
Alb—N	0.002	0.040	Nil	0.003	0.003	0.056	0.002	0.003	0.008	0.002	0.002	Tr.	0.003	0.030	0.024	Sample not collected												0.034	0.052	0.002	0.008	0.008	0.002	0.048
NO ₂ —N	<0.001	<0.001	0.003	<0.001	0.005	0.005	0.005	0.005	0.001	<0.001	0.005	INT.	<0.001	0.005	0.001	Sample not collected												<0.001	0.001	0.001	0.003	0.005	0.005	Pr.
NO ₃ —N	INT.	INT.	INT.	INT.	Sample not collected												INT.	Tr.	Tr.	M. Tr.	M. Tr.	Tr.	Tr.	Tr.	Sample not collected				Pr.	0.001				
Oxy. Abs	0.109	0.091	0.070	0.071	Sample not collected												...	0.166	0.129	0.124	0.126	0.180	0.119	0.124	0.141	0.134	0.137	0.220	0.150	0.151				
P.T.H. Alkalinity	4.2	4.5	3.0	2.2	1.9	1.9	0.2	1.5	0.9	1.6	2.2	2.8	4.4	4.7	5.9	Sample not collected												3.0	7.7	3.2	3.5	4.4	2.8	4.3
M.O. Alkalinity	39.8	40.1	42.7	33.5	33.5	33.5	31.7	32.3	33.0	32.0	32.5	35.0	33.1	32.0	36.8	Sample not collected												32.7	33.3	30.3	24.8	29.1	29.0	33.3
P.H.	7.5	7.4	8.0	8.4	8.4	8.4	8.4	8.0	7.6	8.4	7.8	7.4	6.8	7.0	7.0	Sample not collected												7.5	7.0	7.1	6.8	7.5	7.2	7.0
Chlorides	80.0	73.0	70.5	67.0	63.0	63.0	65.0	63.0	61.0	63.0	66.0	57.0	87.0	46.0	82.0	Sample not collected												84.0	86.0	86.0	80.0	60.0	72.0	82.0
Total Hardness	92.0	85.0	72.0	74.0	60.0	60.0	52.0	60.0	54.0	69.0	67.0	61.0	47.0	50.5	84.0	Sample not collected												66.5	19.0	56.0	58.0	54.0	50.0	60.0
Total Solids	230.0	238.0	188.0	228.0	217.6	217.6	217.6	202.0	299.6	202.4	214.8	169.2	184.0	17.0	242.1	Sample not collected												178.0	234.8	208.0	203.2	189.6	172.4	210.8
Iron	Nil	0.003	Nil	0.004	0.02	0.005	0.005	M. Tr.	M. Tr.	M. Tr.	0.005	M. Tr.	0.020	0.040	0.060	Sample not collected												0.090	2.5	0.100	0.20	0.02	0.10	0.10
B. Coli present in 2 c.c.s and upwards.	1.0	60	1.0	60	1.0	1.0	60	1.0	1.0	60	1.0	60	1.0	1.0	1.0	Sample not collected												1.0	5.0	1.0	5.0	1.0	1.0	20.0

Results of Chemical & Bacteriological Examination of the Shallow Wells used as Sources of Water Supply to Outlying Areas in 1955.
(Results expressed in parts per 100,000)

1955		Urur Well—East, Adyar												Urur Well—West, Adyar											
Months	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Colour	c. & c.	c.&c.	c. & c.		c. & c.w. & h.	s. y.	s. h.	c. & c.	c. & c.	c. & c.	c.&c.	c. & c.	c. & c.	c.&c.	c. & c.		c. & c.	c.&c.s.y.&h.	c. & c. c. & c.	c. & c. c. & c.	c. & c. c. & c.	c. & c. c. & c.	c. & c. c. & c.		
Am—N	Nil	0.002	0.001		0.003	0.004	0.002	0.004	0.002	0.004	Nil	0.002	Nil	0.003	0.001		0.003	0.004	0.010	0.003	0.004	0.004	Nil	0.002	
Alb—N	0.005	0.002	0.002		Nil	0.003	0.003	0.004	0.002	0.003	Nil	0.010	0.005	0.010	0.001		Nil	0.002	0.010	0.002	0.002	0.003	Nil	0.002	
NO ₂ —N	<0.001	0.001	<0.001		<0.001	<0.001	0.005	<0.01	<0.001	<0.001	Nil	<0.001	<0.001	0.001	<0.001		<0.001	0.001	<0.001	<0.001	<0.001	<0.001	Nil	Pr.	
NO ₃ —N	Tr.	Tr.	M. Tr.		Pr.	Tr.	M. Tr.	Tr.	Pr.	M. Tr.	Tr.	Tr.	Tr.	Tr.	Tr.		Pr.	Tr.	Pr.	Tr.	Pr.	Tr.	Tr.	<0.001	
Oxy. Abs.	0.124	0.066	0.028		0.038	0.105	0.118	0.051	0.102	0.073	0.112	0.01	0.107	0.033	0.037		0.091	0.109	0.100	0.089	0.091	0.049	0.070	0.088	
P.T.H. Alkalinity	0.09	0.08	0.10		0.06	0.06	0.07	0.03	0.05	0.04	0.05	0.04	0.08	0.09	0.11		0.09	0.07	0.10	0.05	0.07	0.07	0.05	0.05	
M.O. Alkalinity	10.5	10.7	10.6		10.1	9.8	9.7	9.8	14.8	20.1	10.5	10.2	15.1	12.5	12.6		14.2	13.9	14.0	10.1	14.3	14.1	15.5	15.0	
P.H.	7.7	7.7	7.8		7.8	7.8	7.9	8.2	7.7	7.8	8.0	8.0	7.8	7.7	7.8		7.8	8.2	8.3	8.2	7.8	8.0	8.0	8.0	
Chlorides	2.0	3.0	2.0		9.0	3.0	4.0	4.0	3.0	4.0	5.0	5.0	4.0	4.0	4.5		10.0	3.0	4.0	3.0	4.0	4.0	6.0	3.0	
Total Hardness	11.0	14.0	14.0		3.0	15.0	10.0	11.0	12.0	16.0	12.0	16.0	13.0	14.5	19.0		2.0	15.0	15.0	11.0	16.0	15.0	8.0	11.0	
Total Solids	26.0	23.8	27.0		35.6	26.0	23.6	23.6	19.2	16.0	38.6	26.0	32.0	28.0	24.5		33.6	124.8	28.0	20.8	21.6	30.0	40.2	24.0	
Iron	0.020	0.012	0.010		0.005	0.015	0.02	0.02	0.02	0.005	0.015	Nil	0.010	0.009	0.004		Nil	M. Tr.	Nil	0.01	M. Tr.	0.01	0.005	0.03	
B. Coli present in ? c.c's and upwards	60	1.0	60		1.0	20	1.0	60	60	1.0	20	60	60	1.0	60		60	10	60	60	60	1.0	20	60	

APPENDIX

Summarised Report on the Sterilisation of Water Mains
during the year 1955

APPENDIX

Nos.	Place	Period	Length of pipe line sterilised	Total lbs. of chlorine used	Before Sterilisation						After Sterilisation						% of reduction or increase in the Ammoniacal Nitro- gen content in the treat- ed samples as compared with that of untreated samples	% of reduction or increase in the Albuminoid Nitro- gen content in the treated samples as compared with that of untreated samples	% of reduction or increase in Iron content in the treated samples as com- pared with that of un- treated samples.
					Ammonia- cal Nitro- gen	Albumi- noid Ni- trogen	Absorbed Oxygen (Tidy's)	Iron	Phosphate	Ammonia- cal Nitro- gen	Albumi- noid Ni- trogen	Absorbed Oxygen (Tidy's)	Iron	Phosphate	Ammonia- cal Nitro- gen	Albumi- noid Ni- trogen			
1.	At the junction of Mowbrays Rd. & Sir C. V. Raman Road. (8 days)	1-1-55 to 17-1-55	1 mile	252	0.002	0.003	0.156	0.04	0.001	0.002	0.004	0.133	0.15	0.001	0.002	0.004	Nil	+33	+275
2.	At the junction of St. Mary's Road & Mowbrays Road (14 days)	18-1-55 to 6-2-55	2 fur- longs	318	0.002	0.010	0.141	0.016	0.001	0.002	0.008	0.133	0.012	0.001	0.002	0.008	Nil	-20	-25
3.	St. Mary's Road near Corporation School. (12 days)	7-2-55 to 21-2-55	3 fur- longs	168	0.003	0.024	0.139	0.016	0.001	0.005	0.020	0.126	0.640	0.001	0.005	0.020	+66	-17	+3900
4.	St. Mary's Rd. near the Cemetery Road. (25 days)	22-2-55 to 22-3-55	1 mile	350	0.003	0.042	0.139	0.040	0.001	0.003	0.040	0.065	0.120	0.001	0.003	0.040	Nil	5	+200
5.	Mada Church Rd. at the junction of St. Thome High Rd. (17 days)	23-3-55 to 17-4-55	5 fur- longs	238	—	—	0.171	0.021	0.001	—	—	0.160	0.018	0.002	—	—	—	—	-14
6.	St. Thome High Road. (20 days)	18-4-55 to 9-5-55	2 fur- longs	280	0.004	0.028	0.156	0.039	0.001	0.003	0.025	0.154	0.046	0.001	0.003	0.025	-25	-11	+17
7.	Jaganathapuram (Dhobikahana)	10-5-55 to 29-5-55	2 fur- longs	238	0.009	0.04	0.144	0.017	0.001	0.003	0.033	0.149	0.012	0.001	0.003	0.033	-67	-18	-30
8.	Harrington Road	1-6-55 to 14-6-55	3 fur- longs	168	0.003	0.048	0.175	0.040	0.002	0.003	0.003	0.145	0.239	0.001	0.003	0.003	Nil	-93	+5000
9.	Spur Tank Road	15-6-55 to 3-7-55	2 fur- longs	182	0.003	0.009	0.193	0.014	0.001	0.002	0.009	0.169	0.100	0.001	0.002	0.009	-33	Nil	+600

Summarised Report on the Sterilisation of Water Mains
during the year 1955 (Cont.)

during the year 1955 (Cont.)																			
Nos.	Place	Period	Length of pipe line sterilised	Total lbs. of Chlorine used	Before Sterilisation								After Sterilisation				% of reduction or increase in the Ammoniacal Nitrogen contents in the treated samples as compared with that of untreated samples.	% of reduction or increase in the Albuminoid Nitro- gen contents in the treated samples as compared with that of untreated samples.	% of reduction or increase in the Iron contents in the treated samples as compar- ed with that of untreated samples.
					Ammoniacal Nitrogen	Albuminoid Nitrogen	Absorbed Oxygen (Tidy's)	Iron	Phosphate	Ammoniacal Nitrogen	Albuminoid Nitrogen	Absorbed Oxygen (Tidy's)	Iron	Phosphate					
10	Casa Major Road	5-7-55 to 26-7-55 (16 days)	2 fur- longs	160	0.002	0.030	0.224	0.021	0.001	0.004	0.004	0.196	0.016	0.001	+100	— 87	— 25		
11	Pantheon Road	27.7-55 to 14-8-55 (16 days)	2 "	340	0.002	0.064	0.212	0.030	0.001	0.008	0.064	0.200	0.035	0.001	+300	Nil	+17		
12	Marshal's Road	16-8-55 to 7-9-55 (19 days)	2 "	190	0.009	0.036	0.212	0.024	0.001	0.009	0.036	0.204	0.021	0.001	Nil	Nil	— 13		
13	College Road	9-9-55 to 20-10-55 (24 days)	2 "	296	0.002	0.001	0.136	0.024	0.001	0.002	0.024	0.051	0.100	0.001	Nil	+2 00	—317		
14	Ebrahim Sahib Street	23-10-55 to 15-11-55 (13 days)	2 "	146	—	—	0.159	0.06	0.001	—	—	0.186	0.08	0.001	—	—	+33		
15	Sterling Road	17-11-55 to 8-12-55 (9 days)	2 "	90	0.002	0.048	0.163	0.021	0.001	Nil	0.044	0.112	0.03	0.001	—100	—8	+43		
16	Village Road	9-12-55 to 15-12-55 (5 days)	2 "	50	Nil	0.04	0.187	0.020	0.003	Nil	0.04	0.183	0.017	0.003	Nil	Nil	— 15		
17	Egmore High Road	16-12-55 to 30-12-55 (6 days)	2 "	60	—	—	—	—	—	—	—	—	—	—	—	—	—		

APPENDIX

CHILD WELFARE

STATEMENT No. I.

Showing the number of cases of labour which came under the care and observation of Child Welfare Scheme in 1955

Serial Number	Centre	How Conducted					Caste		Re-marks	
		By Nurses of C.W.S.	Taken to Hospital	Taken over after barber women conducted	Maternity Ward	Total	Non-Muslims	Muslims	Twins	Still Births
1	Tondiarpet ...	185	55	22	1219	1481	1439	42	11	42
2	Palmyrah Kuppam ...	268	14	8	...	290	216	74	2	5
3	Royapuram ...	502	9	20	...	531	368	163	1	11
4	Sanjiviroyanpet ...	407	68	13	1426	1914	1841	73	15	44
5	Washermanpet ...	758	90	22	1405	2275	1740	535	20	70
6	Vyasarpadi ...	272	59	26	706	1063	1050	13	10	31
7	Peddunaickenpet ...	423	11	5	...	439	431	8	3	8
8	George Town ...	299	53	2	750	1104	1001	103	7	18
9	Kothwal Bazaar ...	334	39	5	878	1256	1005	251	9	21
10	Muthialpet ...	656	12	10	...	678	498	180	4	30
11	Treveleyen Basin ...	190	44	...	866	1100	1094	6	7	14
12	Maternity Home, Choolai	469	114	5	1683	2271	2237	34	22	59
13	Pulianthope ...	735	102	31	1187	2055	1607	448	12	37
14	North Perambur ...	332	20	18	...	370	257	113	7	12
15	Sembiam ...	672	56	4	515	1247	1050	197	13	33
16	Ayanavaram ...	613	58	15	142	828	780	48	10	25
17	Kilpauk ...	177	43	13	303	536	514	22	...	7
18	Nammalwarpet ...	320	31	10	...	361	352	9	4	9
19	Kosapet ...	129	4	3	...	136	130	6	2	...
20	Purasawalkam ...	445	32	19	919	1415	1351	64	11	26
21	Periamet ...	290	11	3	...	304	242	62	5	9
22	Edapalayam ...	59	1	3	...	63	63	...	...	2
23	Park Town ...	181	5	...	...	186	185	1	3	1
24	Napier Park ...	421	11	1	...	433	383	50	6	4
25	Egmore ...	302	11	4	...	317	217	100	5	5
26	Chetpet ...	229	31	5	522	787	766	21	9	23
27	Kodambakkam ...	259	65	6	777	1107	1080	27	5	17
28	Royapettah ...	492	32	...	...	524	442	82	1	8
29	Triplicane ...	718	49	7	868	1642	1009	633	12	33
30	Mirsahibpet ...	772	18	4	...	794	466	328	5	10
31	Mylapore ...	630	22	3	...	655	579	76	2	18
32	Teynampet ...	560	16	2	...	578	563	15	1	15
33	Saidapet ...	285	208	1	1598	2092	2037	55	20	32
34	Thyagaraya Nagar ...	393	6	2	...	401	397	4	3	8
35	Saidapet Sub-Centre ...	138	6	10	...	154	151	3	...	1
36	Mandavalli ...	377	3	...	...	380	374	6	4	12
37	Adyar ...	162	19	13	324	518	509	9	1	16
	Total ...	14454	1428	315	16088	32285	28424	3861	252	716

CHILD WELFARE

STATEMENT No. II.

Showing the number of visits paid by the Staff of
Child Welfare Scheme in 1955

Serial No.	Centre	Visits paid by			
		Mid-wives	Health Visitors	Assistant Surgeons	Total
1	Tondiarpet	8086	6683	552	15321
2	Palmyrah Kuppam	4794	6497	215	11506
3	Royapuram	6761	7023	411	14195
4	Sanjiviroyanpet	11423	4551	554	16528
5	Washermanpet	18721	5330	882	24933
6	Vyasarpadi	4187	3250	249	7686
7	Peddunaickenpet	4841	6788	237	11866
8	George Town	6346	4411	754	11511
9	Kothwal Bazaar	5721	4219	727	10667
10	Muthialpet	8547	7862	435	16844
11	Treveleyen Basin	4997	5350	632	10979
12	Maternity Home, Choolai	11845	10132	1266	23243
13	Pulianthope	13736	9285	1601	24622
14	North Perambur	5467	6079	414	11960
15	Sembiam	8277	3749	348	12374
16	Aynavaram	6724	5357	296	12377
17	Kilpauk	5313	4685	874	10872
18	Nammalwarpet	4998	5626	331	10955
19	Kosapet	1383	1340	30	2753
20	Purasawalkam	6642	6364	565	13571
21	Periamet	4331	4209	195	8735
22	Edapalayam	1003	1905	117	3025
23	Park Town	2607	2942	280	5829
24	Napier Park	4752	4391	305	9448
25	Egmore	2987	3363	203	6553
26	Chetpet	4809	5639	1102	11550
27	Kodambakkam	6278	5697	722	12697
28	Royapettah	5504	4315	452	10271
29	Triplicane	9544	12900	1302	23746
30	Mirsahibpet	7418	4799	270	12487
31	Mylapore	4668	5838	243	10749
32	Teynampet	7195	4916	400	12511
33	Saidapet	7674	5574	806	14054
34	Thyagaraya Nagar	5550	4984	206	10740
35	Saidapet Sub-Centre	3014	3343	214	6571
36	Mandaval i	4434	3505	120	8059
37	Adyar	5403	4714	928	11045
Total		2,35,980	1,97,615	19,238	4,52,833

CHILD WELFARE

STATEMENT No. III

Showing the Number of Pre-natal cases registered and the Number of booked cases in 1955

Serial No.	Centre	No. of Prenatal cases Registered	No. of Booked cases which attended the Ante-natal clinic	Cases not confined but brought over to account in the next year
1	Tondiarpet ...	1967	1322	269
2	Palmyrah Kuppam ...	1083	672	49
3	Royapuram ...	1478	1252	124
4	Sanjiviroyenpet ...	1721	1721	233
5	Washermanpet ...	2414	2414	242
6	Vyasarpadi ...	1164	1064	72
7	Peddunaickenpet ...	1275	1095	76
8	George Town ...	1265	1265	275
9	Kothwal Bazaar ...	1160	1154	134
10	Muthialpet ...	1421	1421	30
11	Treveleyen Basin ...	1244	905	139
12	Maty. Home, Choolai ...	2283	2283	290
13	Pulianthope ...	2084	2084	196
14	North Perambur ...	803	798	86
15	Sembiam ...	1443	1442	143
16	Ayanavaram ...	1262	1262	164
17	Kilpauk ...	892	689	44
18	Nammalwarpet ...	691	691	85
19	Kosapet ...	319	319	4
20	Purasawalkam ...	1410	1410	36
21	Periamet ...	838	834	49
22	Edapalayam ...	194	194	29
23	Park Town ...	441	428	43
24	Napier Park ...	1012	1011	118
25	Egmore ...	676	673	36
26	Chetpet ...	1310	1096	549
27	Kodambakkam ...	1214	1057	106
28	Royapettah ...	963	944	64
29	Triplicane ...	2013	2011	164
30	Mirsahibpet ...	1414	1375	108
31	Mylapore ...	1265	1215	50
32	Teynampet ...	991	990	88
33	Saidapet ...	1833	1833	140
34	Thiagaraya Nagar ...	762	759	41
35	Saidapet Sub-Centre ...	547	546	72
36	Mandavalli ...	768	768	51
37	Adyar ...	676	617	54
	Total ...	44296	41614	4453

CHILD WELFARE

STATEMENT No. IV

Showing deaths among cases which came under the treatment of C.W.S.,
Private Doctors etc. during the year 1955

Serial No.	Centre	Deaths among cases brought under care of C. W. S. but not under treatment			Deaths among cases brought under care and treatment of C. W. S.	Total
		Under Private Doctor	Under Vidiāns treatment	In Hospital		
1	Tondiarpet	...	...	...	...	...
2	Palmyrah Kuppam	...	...	...	...	...
3	Royapuram	...	...	...	...	...
4	Sanjiviroyanpet	2	...	3	1	6
5	Washermanpet	...	...	3	...	3
6	Vyasarpadi	...	...	1	...	1
7	Peddunaickenpet	...	...	...	...	...
8	George Town	...	...	3	...	3
9	Kothwal Bazaar	...	...	2	...	2
10	Muthialpet	1	1	...	...	2
11	Treveleyen Basin	...	...	...	...	...
12	Maty. Home, Choolai	...	...	1	...	1
13	Pulianthope	...	...	...	1	1
14	North Perambur	...	...	1	...	1
15	Sembiam	...	...	1	...	1
16	Ayanavaram	...	...	1	...	1
17	Kilpauk	...	...	1	...	1
18	Nammalwarpet	...	...	1	...	1
19	Kosapet	...	...	...	...	...
20	Purasawalkam	...	...	1	2	3
21	Periamet	...	...	3	...	3
22	Edapalayam	...	...	...	...	...
23	Park Town	...	...	1	...	1
24	Napier Park	...	...	3	1	4
25	Egmore	...	...	...	...	...
26	Chetpet	...	...	1	...	1
27	Kodambakkam	...	...	...	...	...
28	Royapettah	...	...	...	...	...
29	Triplicane	...	...	2	...	2
30	Mirsahibpet	...	...	1	1	2
31	Mylapore	...	...	...	...	...
32	Teynampet	...	...	1	...	1
33	Saidapet	...	...	1	...	1
34	Thyagaraya Nagar	...	...	1	...	1
35	Saidapet Sub-Centre	...	...	2	...	2
36	Mandavalli	...	...	...	...	...
37	Adyar	...	...	...	...	...
	Total	3	1	35	6	45

CHILD WELFARE

STATEMENT No. V.

Showing the total number of priority milk consumers
from 1st January to 31st December 1955

Serial No.	Centre	Expectant Mothers	Nursing Mothers	Infants	Toddlers	Total
1	Tondiarpet	...	...	119	...	119
2	Palmyrah Kuppam	...	...	111	...	111
3	Royapuram	...	...	100	...	100
4	Sanjiviroyanpet	...	...	112	...	112
5	Washermanpet	...	...	126	...	126
6	Vyasarpadi	...	...	42	...	42
7	Peddunaickenpet	...	...	67	...	67
8	George Town	...	...	100	...	100
9	Kothwal Bazaar	...	...	114	...	114
10	Muthialpet	...	...	104	...	104
11	Treveleyen Basin	...	...	124	5	129
12	Materniy Home, Choolai...	...	...	115	...	115
13	Pulianthope	...	...	118	...	118
14	North Perambur	...	...	94	...	94
15	Sembiam	...	...	72	...	72
16	Aynavaram	...	...	60	...	60
17	Kilpauk	...	...	102	...	102
18	Nammalwarpet	...	...	62	...	62
19	Kosapet	...	...	...	...	...
20	Purasawalkam	...	...	96	...	96
21	Periamet	...	...	101	...	101
22	Edapalayam	...	...	...	...	...
23	Park Town	...	...	87	...	87
24	Napier Park	...	...	66	...	66
25	Egmore	...	...	89	...	89
26	Chetpet	...	...	85	...	85
27	Kodambakkam	...	...	65	...	65
28	Royapettah	...	...	106	...	106
29	Triplicane	...	...	105	...	105
30	Mirsahibpet	...	...	102	...	102
31	Mylapore	...	...	73	...	73
32	Teynampet	...	...	63	...	63
33	Saidapet	...	...	141	...	141
34	Thyagaraya Nagar	...	...	...	...	...
35	Saidapet Sub-Centre	...	...	86	...	86
36	Mandavalli	...	...	116	...	116
37	Adyar	...	...	57	...	57
	Total	...	...	3180	5	3185

CHILD WELFARE

STATEMENT No. VI

Statement showing the Serological Examinations of Blood of Antenatal Cases during the year 1955.

Serial No.	Centre	Total number of blood samples examined	Number of positive cases	No. of positive cases that took full course of treatment	Number of positive cases that took partial treatment	Number of positive cases that did not turn up for treatment in spite of persuasion by the Staff
1	Choolai Maternity Home ...	2129	104	49	23	32
2	Saidapet Centre ...	1514	105	45	24	36
3	Sanjiviroyenpet „ ...	1421	86	22	31	33
4	Triplicane „ ...	1690	63	25	23	15
5	Pulianthope „ ...	1894	130	54	43	33
6	Washermanpet „ ...	2225	182	31	27	124
7	George Town „ ...	1084	70	51	7	12
8	Sembiam „ ...	821	46	11	20	15
	Ayanavaram * „ ...	276	16	10	4	2
9	Purasawalkam „ ...	1075	48	12	12	24
10	Treveleyen Basin „ ...	829	50	35	9	6
		14,958	900	345	223	332

* Serological examination of blood of Antenatal cases was stopped at Sembiam Centre and commenced at Ayanavaram from 22-10-1955.

CHILD WELFARE

STATEMENT No. VII

Statement showing the number of labour cases that came under the care and observation of Child Welfare Scheme ; Infant mortality rate and Maternal mortality rate of Child Welfare Scheme from 1940 to 1955.

Year.		No. of labour cases that came under the care and observation	Infant Mortality rate (per 1000)	Maternal Mortality rate (per 1000)
1940	...	14,489	115.80	2.50
1941	...	14,984	103.40	2.60
1942	...	8,390	104.40	3.00
1943	...	11,227	113.50	2.40
1944	...	10,591	140.60	2.20
1945	...	14,002	141.90	1.57
1946	...	19,147	102.80	2.50
1947	...	18,412	81.70	1.95
1948	...	26,051	83.00	1.91
1949	...	28,129	70.41	2.31
1950	...	26,957	95.52	2.00
1951	...	29,931	123.16	1.90
1952	...	32,264	125.43	1.73
1953	...	27,219	114.23	1.76
1954	...	29,209	110.31	1.27
1955	...	32,285	105.75	1.39

Showing Pre-natal Cases Registered and Ailments of Pregnancy Diagnosed and Patients Advised in 1955.

Serial Number	Centre	Cardio-Vascular diseases			Respiratory diseases				Alimentary tract diseases				Diseases of Urinary Tract			Toxaemia of Pregnancy				Deficiency diseases			Pyrexia			Debi- lity	Specific diseases				Other diseases & abnor- malities of Pregnancy					Normal	Other diseases	Total	
		Valvular diseases of the Heart (V.D.H.)	Hyper-tension	Vericose Veins	Bronchitis	Pneumonia	Pulmonary Tuberculosis	Asthma	Constipation	Dyspepsia	Diarrhoea	Dysentery	Scanty Micturi- tion & Reten- tion of Urine	Albuminuria	Pyelitis	Pre-eclamptic Toxaemia	Eclampsia	Acute-yellow atrophy of the liver (Jaundice)	General Anasarca	Calcium deficiency	Vitamin deficiency	Other Nutritional deficiency	Influenza	Malaria	Rheumatism		General debility (Emaciation)	Skin diseases	Ear, Nose & Throat	V.D. Syphilis	Gonorrhoea	Leucorrhoea	Morning Sickness	Anaemia	Ante-partum Hæmorrhage				Breast abscess
1	Tondiarpet ...	6	5	—	44	—	—	—	43	8	9	9	103	—	—	4	—	—	—	—	190	—	15	—	1	43	3	—	1	—	—	210	—	1	—	—	579	48	1322
2	Palmyrahkuppam.	—	—	1	29	—	—	2	40	6	30	8	69	—	—	7	—	—	—	43	77	8	6	—	—	—	—	—	—	2	—	165	—	—	—	153	26	672	
3	Royapuram ...	2	2	—	69	—	—	—	29	45	32	15	101	—	—	49	—	—	—	38	122	—	9	—	—	2	3	1	—	9	—	170	—	—	—	488	64	1252	
4	Sanjiviroyanpet ...	2	1	4	107	22	2	8	29	12	34	23	32	13	2	23	—	3	5	23	53	12	8	8	3	45	26	8	86	3	12	405	3	5	2	565	132	1721	
5	Washermanpet ...	2	—	1	14	—	—	3	16	77	13	12	19	4	2	5	—	—	39	—	76	28	—	—	—	129	6	4	—	1	—	130	—	—	3	1570	260	2414	
6	Vyasarpadi ...	1	—	1	51	—	1	2	79	45	16	1	43	3	—	—	—	—	—	14	35	—	3	2	—	38	4	—	—	9	—	65	—	—	—	440	211	1064	
7	Peddunaickenpet.	2	—	2	71	—	—	6	73	115	20	17	136	24	—	24	—	—	9	49	58	39	15	27	1	26	22	16	—	5	28	92	9	6	5	93	103	1095	
8	George Town ...	3	1	—	10	—	4	6	6	99	11	12	—	11	—	10	—	—	—	27	132	5	110	—	—	63	19	—	2	—	—	212	1	1	—	434	86	1265	
9	Kothwal Bazaar	1	—	—	1	—	—	3	—	31	7	8	—	—	—	5	—	—	—	14	58	9	41	4	—	59	2	—	1	—	3	168	—	—	—	583	156	1154	
10	Muthialpet ...	5	2	2	82	8	2	6	140	216	155	160	144	4	1	15	—	1	15	24	83	45	55	15	5	13	11	—	1	4	15	53	2	2	3	82	50	1421	
11	Trevelyan Basin.	—	—	—	62	1	2	—	2	46	20	5	36	—	—	8	—	—	—	7	43	—	8	—	—	32	5	—	1	—	—	53	—	—	—	482	92	905	
12	Maternity Home, Choolai.	5	10	4	120	1	5	7	80	91	51	7	122	1	—	68	—	—	—	1	221	28	14	—	1	111	16	2	88	18	3	277	—	2	8	743	178	2283	
13	Pulianthope ...	4	—	—	90	—	6	8	69	87	35	13	35	3	2	44	1	—	—	—	103	—	1	—	—	69	16	—	2	2	—	262	1	—	1	1151	79	2084	
14	North Perambur.	—	—	—	52	—	—	—	26	44	11	10	8	—	—	—	—	—	—	76	—	—	25	—	—	11	—	—	—	—	—	88	—	—	—	403	44	798	
15	Semb am ...	—	—	—	89	—	—	—	107	8	30	—	34	—	—	—	—	—	13	1	64	—	—	—	1	25	11	3	3	—	—	62	—	—	—	664	327	1442	
16	Ayanavaram ...	1	—	—	58	3	—	2	49	68	15	14	27	2	—	14	—	—	—	—	64	—	5	—	—	21	4	—	—	—	1	108	—	—	—	719	87	1262	
17	Kilpauk ...	1	—	—	24	—	—	—	89	38	21	15	22	4	—	4	—	—	—	19	54	4	22	3	—	—	6	—	—	—	—	23	—	—	—	226	114	689	
18	Nammalwarpet ...	—	—	—	34	—	—	1	—	60	2	7	19	5	—	1	—	—	—	4	82	2	7	—	3	34	6	—	—	1	3	94	—	1	—	196	129	691	
19	Kosapet ...	—	—	—	8	—	—	1	78	107	—	3	86	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	3	—	—	—	15	17	319	
20	Purasawalkam ...	—	—	—	39	—	—	1	278	493	16	10	324	—	—	1	—	—	—	—	16	8	3	4	—	22	3	—	—	1	—	33	—	—	—	136	22	1410	
21	Periamet ...	2	3	—	36	—	—	3	337	35	25	9	8	20	—	—	1	3	—	2	27	3	13	2	1	29	5	1	4	—	1	95	—	—	—	128	41	834	
22	Edapalayam ...	—	1	1	7	—	—	1	38	26	7	4	30	—	—	—	—	—	—	2	2	1	3	4	—	23	3	—	—	—	—	28	—	—	—	13	—	194	
23	Park Town ...	—	—	—	23	—	—	1	36	20	9	7	24	3	2	1	1	—	—	—	18	20	11	7	—	41	1	—	—	—	—	42	—	2	—	90	69	428	
24	Napier Park ...	2	5	1	35	—	—	1	389	18	21	10	12	12	—	—	—	1	—	—	53	—	11	2	1	21	4	—	2	2	3	221	—	1	—	143	40	1011	
25	Egmore ...	—	—	—	24	—	—	1	347	3	14	—	14	4	—	—	—	—	—	1	19	3	14	5	1	17	1	—	1	—	2	78	—	2	—	120	2	673	
26	Chetpet ...	—	—	—	—	—	—	—	194	124	3	2	37	—	—	—	—	—	—	—	74	—	—	—	—	171	5	—	—	—	—	39	—	—	—	249	198	1096	
27	Kodambakkam ...	5	—	3	23	—	—	2	60	111	17	11	30	—	—	13	—	1	—	—	94	—	8	—	—	15	2	1	2	12	2	—	2	—	—	328	315	1057	
28	Royapettah ...	20	—	6	42	—	1	1	—	141	12	6	123	7	—	—	—	—	—	3	80	—	5	—	—	142	13	—	—	—	24	—	96	—	—	—	111	111	944
29	Triplicane ...	2	—	3	56	—	3	3	—	209	23	7	30	—	32	21	—	—	—	—	343	—	50	—	—	130	25	3	9	7	—	206	—	—	—	633	216	2011	
30	Mirsahibpet ...	4	—	—	23	—	—	8	4	94	11	7	—	—	2	6	—	—	—	—	305	—	19	—	8	31	6	6	8	—	—	197	—	—	—	632	4	1375	
31	Mylapore ...	10	1	—	27	—	2	15	—	74	19	7	—	—	9	24	—	—	—	5	275	—	24	3	—	29	12	2	8	—	—	223	—	1	—	442	3	1215	
32	Teynampet ...	—	—	—	50	—	—	—	90	174	4	4	60	18	—	—	—	—	—	—	96	—	1	—	—	115	4	—	—	—	—	121	—	—	2	128	123	990	
33	Saidapet ...	6	—	3	31	—	—	—	29	17	6	20	22	20	—	5	—	1	—	3	171	—	16	—	1	44	23	—	2	—	5	125	—	—	—	1249	34	1833	
34	Thyagarayanagar.	—	—	—	10	—	—	3	60	31	8	4	117	—	—	5	—	—	—	—	58	13	—	—	—	51	—	—	—	—	—	100	—	—	—	194	105		

Showing Maternal Morbidity (Puerperal) in the year 1955.

Serial Number	Centre	Normal Pregnancy										Diseases of Pregnancy	Ante-Partum complications (before delivery)					Intra and Post Partum complications					Complications during puerperium										Total									
		Respiratory diseases				Other diseases							Pre-Eclampsia	Eclampsia	Hyperemesis	Accute Yellow atrophy of the Liver (Jaundice)	Accidental morrhage	Placenta Prævia	Anæmia	Abnormal Presentation	Hydatiform mole	Ectopic Gestation	Placenta Prævia	Retained Placenta	Post-Partum Hæ-morrhage	Anatomical Abnormality contracted Pelvis	Malposition and Disproportion	Tedious Labour delayed 2nd Stage	Perineal & Cervical Laceration	Urinary complications	Puerperal Sepsis	Phlebitis, Thrombosis		Pyrexia	Uterine disorders	Puerperal Toxæmias	Anæmia	Psychosis	Disorders of lactation	Other diseases		
		Bronchitis	Pneumonias	Pulmonary Tuberculosis	Asthma	Extreme Debility	Veneral diseases	Heart diseases	Pyrexias	Infectious	Skin diseases	Deficiency diseases																													Gastro-Intestinal disorders	
1	Tondiarpet	—	—	—	—	—	1	—	—	—	—	4	11	—	—	4	4	—	4	—	—	—	6	4	—	3	—	25	92	—	3	—	2	—	—	2	—	—	7	174		
2	Palmyrahkuppam	3	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	41	—	—	—	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	—	8	68			
3	Royapuram	13	—	—	—	—	—	9	—	—	50	—	13	2	—	—	1	—	27	5	—	—	—	—	—	—	—	8	15	—	—	—	13	9	—	5	—	—	6	187		
4	Sanjiviroyanpet	39	—	1	2	7	—	1	3	—	7	2	26	11	—	1	3	2	15	10	—	—	1	—	—	1	4	23	94	2	5	1	2	35	1	50	—	1	23	373		
5	Washermanpet	14	—	—	1	—	—	—	—	—	6	26	—	12	—	—	—	—	—	—	—	—	—	5	—	—	—	—	64	—	—	—	—	—	—	116	1	—	369	648		
6	Vysarpadi	11	2	2	3	19	2	1	7	7	6	9	6	4	—	—	5	4	2	12	16	—	1	6	10	13	—	—	21	12	7	3	1	7	6	1	10	—	7	31	254	
7	Peddunaickenpet	16	3	—	5	13	—	4	5	—	6	17	—	3	2	7	—	3	—	14	3	—	—	—	—	5	—	—	—	5	4	3	—	3	5	5	2	—	—	11	144	
8	George Town	8	—	2	2	21	36	2	2	—	12	77	21	4	—	—	—	—	—	109	2	—	—	—	—	4	—	—	10	28	—	—	—	4	—	—	8	—	—	20	372	
9	Kothwal Bazaar	3	—	—	2	32	—	—	14	—	6	44	39	12	3	—	1	2	—	66	16	—	—	1	17	—	—	49	89	4	12	—	24	3	—	85	—	—	16	540		
10	Muthialpet	13	—	1	3	5	2	2	12	1	14	10	13	6	—	8	—	2	—	18	—	—	—	—	—	—	—	10	13	3	12	—	22	5	—	18	1	6	2	202		
11	Trevelyen Basin	—	—	—	—	—	1	—	—	—	1	—	3	2	3	—	—	8	—	38	3	—	—	4	6	—	—	21	42	—	13	—	25	—	2	51	—	—	16	240		
12	Maternity Home, Choolai.	38	—	1	—	40	49	—	20	—	11	11	1	22	4	—	—	8	1	28	34	—	—	2	22	—	1	—	64	141	—	2	—	32	1	2	—	—	—	67	602	
13	Pulianthope	90	—	6	8	69	2	4	1	—	16	103	204	9	3	—	—	5	—	4	16	—	—	1	3	21	—	—	47	14	2	23	—	69	—	1	8	—	3	21	753	
14	North Perambur	7	1	—	—	4	—	—	5	—	2	—	—	1	—	—	—	3	—	3	—	—	—	—	—	4	—	1	1	10	3	2	6	—	4	—	10	—	—	16	83	
15	Sembiam	—	—	—	—	—	—	—	1	—	—	7	—	9	—	—	—	7	—	1	9	—	—	2	18	—	—	—	—	—	—	12	28	—	38	26	—	56	—	31	36	282
16	Ayanavaram	16	3	3	—	18	—	—	12	1	2	—	—	12	3	—	—	5	—	—	9	—	—	1	3	—	1	—	33	15	2	4	—	25	2	—	16	—	1	29	216	
17	Kilpauk	18	5	—	6	19	1	—	15	—	6	23	10	3	3	—	—	2	—	19	4	—	—	1	7	—	—	—	19	8	—	2	—	—	13	—	—	—	—	9	193	
18	Nammalwarpet	4	—	—	—	4	—	—	—	—	2	—	—	—	—	—	—	—	—	8	—	—	—	—	—	1	—	—	6	2	4	—	—	8	2	—	5	—	2	—	48	
19	Kosapet	8	—	—	1	—	—	—	1	—	—	13	3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	6	2	—	—	—	8	2	—	—	—	—	—	32	
20	Purasawalkam	30	—	—	3	10	—	1	10	—	12	20	3	—	7	2	—	5	—	40	5	—	—	—	—	1	—	—	27	10	30	5	—	28	2	2	40	—	—	60	353	
21	Periamet	43	—	—	2	14	—	—	2	—	11	24	—	—	—	8	—	1	—	29	—	—	—	1	—	—	—	—	8	4	11	1	—	3	—	—	9	—	—	3	174	
22	Edapalayam	5	—	—	4	9	—	—	1	—	7	2	9	—	—	—	—	—	—	11	1	—	—	—	—	1	—	—	—	—	5	—	—	5	—	—	—	—	—	3	63	
23	Park Town	4	—	—	2	2	—	—	4	—	—	4	—	—	—	—	—	1	—	9	1	—	—	1	—	—	—	—	1	7	5	—	—	9	1	—	23	—	6	8	88	
24	Napier Park	19	—	—	—	21	—	—	9	1	2	27	2	—	2	2	—	—	3	19	6	—	—	—	—	—	—	—	10	6	—	—	—	12	—	—	22	—	—	4	167	
25	Egmore	15	3	—	3	18	—	—	12	—	3	22	10	3	2	7	—	—	—	13	4	—	—	—	1	1	—	—	—	7	6	2	—	—	2	2	—	12	—	—	—	148
26	Chetpet	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	3	—	—	—	—	2	—	—	—	—	—	—	—	2	2	—	12	—	—	—	148	
27	Kodambakkam	—	—	—	—	—	1	1	—	—	—	—	3	6	—	—	—	—	1	—	—	—	—	—	—	2	—	—	20	17	1	10	—	3	—	—	3	—	1	20	84	
28	Royapettah	—	—	—	—	4	—	—	2	—	—	—	—	1	1	4	—	5	—	2	3	—	—	1	5	—	—	—	—	37	—	9	—	—	—	—	—	—	—	—	63	
29	Triplicane	8	—	—	—	9	—	—	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19	—	—	29	—	—	37	145	
30	Mirsaibpet	21	—	—	3	104	—	—	6	—	5	140	7	—	—	—	—	4	—	37	1	—	—	1	1	—	—	3	29	22	—	—	—	58	—	—	2	—	19	185		
31	Mylapore	5	1	—	2	1	1	1	6	—	—	—	1	—	1	—	—	—	—	9	7	—	—	1	2	—	—	—	8	20	—	—	—	19	8	—						

Showing Infants born in the year 1954 and kept under observation for a period of one year after birth.

Serial No.	Centres	Total No. of Infants born in 1954	Total No. of still-births in 1954	Died within												Total No. of deaths excluding still births	Left the city or otherwise not traceable	Said to be well	Out of Divisions	No. of living children in the city when one year old	No. of living children when one year old
				1 to 7 days		8 days to 1 month		2 to 3 months		4 to 6 months		7 to 9 months		10 to 12 months							
				Died	Not traceable	Died	Not traceable	Died	Not traceable	Died	Not traceable	Died	Not traceable	Died	Not traceable						
1	Tondiarpet	1278	35	37	...	9	1	25	...	26	5	33	14	14	50	144	70	76	183	770	1029
2	Palmyrah Kuppam	209	4	5	...	2	...	4	...	10	...	10	2	1	1	32	3	24	...	146	170
3	Royapuram	439	7	7	...	2	1	8	2	11	6	12	9	10	6	50	24	25	...	333	358
4	Sanjivirayenpet	1599	32	18	18	18	12	37	16	27	26	24	32	11	24	135	128	155	1	1148	1304
5	Washermanpet	2167	59	71	31	30	4	39	8	51	6	39	19	32	153	262	221	349	18	1258	1625
6	Vyasarpadi	199	5	1	1	3	1	1	...	4	2	3	2	2	6	14	12	28	...	140	168
7	Peddunaickapet	240	3	7	...	1	...	4	...	7	...	8	4	1	5	28	9	16	...	184	200
8	George Town	1126	29	26	11	9	4	18	9	24	19	19	23	13	64	109	130	221	...	637	858
9	Kothwal Bazaar	1050	22	18	23	14	1	12	4	23	20	22	25	22	28	111	101	145	...	671	816
10	Muthialpet	638	16	8	...	5	...	11	2	15	6	13	5	9	5	61	18	50	...	493	543
11	Treveyen Basin	1293	26	35	22	5	3	21	10	24	9	29	18	16	35	130	97	164	164	712	1040
12	Maternity Home, Choolai.	2084	56	49	44	26	4	33	10	41	17	49	15	35	64	233	154	221	...	1420	1641
13	Pulianthope	1910	55	44	6	14	7	41	10	40	32	40	52	30	80	209	187	218	198	1043	1459
14	North Perambur	969	25	10	16	6	9	13	13	16	4	16	18	12	20	73	80	123	19	649	791
15	Sembiam	1243	37	29	8	10	1	9	7	12	22	16	20	8	54	84	112	154	108	748	1010
16	Ayanavaram	594	25	19	1	6	1	9	1	23	5	5	3	5	2	67	13	59	...	430	489
17	Kilpauk	563	10	15	6	12	1	13	6	6	7	12	5	5	1	63	26	66	2	396	464
18	Nammalwarpet	206	5	5	...	1	...	3	...	2	1	6	2	...	6	17	9	...	...	175	175
19	Kosapet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Purasawalkam	1456	35	29	3	26	6	32	7	30	11	18	14	18	97	153	138	247	13	870	1130
21	Periamet	247	6	3	...	1	...	9	1	2	4	4	...	3	...	22	5	19	...	195	214
22	Edapalayam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Park Town	239	14	9	...	3	...	2	...	4	1	7	...	6	1	31	2	17	...	175	192
24	Napier Park	357	7	8	...	6	...	8	2	7	4	9	2	2	2	40	10	43	...	257	300
25	Egmore	282	7	3	...	3	...	2	1	5	2	2	4	8	2	23	9	39	...	204	243
26	Chetpet	682	17	20	8	4	...	13	7	17	9	8	8	6	5	68	37	71	2	487	560
27	Kodambakkam	954	27	17	10	13	6	21	5	17	23	6	13	11	22	85	79	156	32	575	763
28	Royapetah	462	9	7	...	14	...	11	2	7	4	16	5	5	...	60	11	38	...	344	382
29	Triplicane	1664	33	35	16	27	9	29	22	39	36	35	28	24	26	189	137	134	...	1171	1305
30	Mirsaibpet	691	17	18	...	7	...	8	6	12	8	13	23	10	50	68	87	40	...	479	519
31	Mylapore	625	17	8	1	11	...	10	...	11	...	17	3	8	9	65	13	34	...	496	530
32	Teynampet	526	14	10	...	9	...	10	...	10	...	14	...	16	16	69	16	70	...	357	427
33	Saidapet	1907	53	37	38	21	51	35	36	32	49	40	28	17	21	182	223	260	248	941	1449
34	Thyagaraya Nagar	406	11	14	...	8	2	5	6	8	4	9	3	3	3	47	18	45	...	285	330
35	Saidapet Sub-centre	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	Mandavalli	410	9	5	...	7	1	10	1	6	5	9	5	6	10	43	22	35	...	301	336
37	Adyar	494	5	11	5	1	3	6	3	9	5	7	4	8	3	42	23	48	62	314	424
Total		29209	732	638	268	334	128	512	197	578	352	570	408	377	871	3009	2224	3390	1050	18804	23244

APPENDIX

APPENDIX

Showing causes of deaths among Infants born in 1954 and kept under observation during 1st year of life.

Serial Number	Centre	Total number of Infants born in 1954	Total number of live births	Total number of still-births	Neo-Natal deaths					Infectious diseases					Fevers		Diseases of Respiratory System			Diseases of Alimentary System			Diseases of Urinary System		Diseases of liver		V.D.	Diseases of Nervous System					Deficiency diseases		General causes			Causes not known	Total number of deaths excluding still-births	Left city or otherwise not traceable	Said to be well	Out of division	Number of living children in the city when one year old	Total number of living children when one year old		
					Pre-maturity	Asphyxia	Neo-Natural Birth injuries	Congenital Malformation and their complications	Others	Cholera	Small-pox	Diphtheria	Measles	Enteric fever	Anterior Poliomyelitis	Meningitis	Others	Malaria	Kalaazar	Others	Tuberculosis of lungs	Pneumonia	Others	Diarrhoea	Dysentery	Others		Nephritis	Others	Cirrhosis	Others	Congenital Syphilis	Convulsion	Tetanus	T.B. Meningitis	Others	Rickets								Malnutrition	Others
1	Tondiarpet ...	1278	1243	35	33	8	2	13	32	36	6	2	...	3	1	3	3	2	...	144	70	76	183	770	1029			
2	Palmyrahkuppam	209	205	4	4	1	13	10	2	1	1	...	32	3	24	...	146	170				
3	Royapuram ...	439	432	7	5	3	...	1	6	...	1	...	22	4	5	1	50	24	25	...	333	358					
4	Sanjiviroyenpet ...	1599	1567	32	16	2	...	3	4	...	1	7	...	29	5	35	8	2	6	3	5	1	...	6	2	135	128	155	1	1148	1304			
5	Washermanpet ...	2167	2108	59	46	25	1	14	...	47	1	56	7	6	1	...	5	2	20	7	4	20	262	221	349	18	1258	1625			
6	Vyasarpadi ...	199	194	5	1	1	2	...	5	1	1	3	...	14	12	28	...	140	168			
7	Peddunaickenpet.	240	237	3	7	1	5	1	7	1	1	2	1	1	1	28	9	16	...	184	200				
8	George Town ...	1126	1097	29	21	8	1	8	...	10	10	25	8	5	1	1	...	2	6	2	1	109	130	221	...	637	858			
9	Kothwal Bazaar.	1050	1028	22	11	7	1	1	...	4	...	22	1	25	6	1	1	5	1	13	6	4	2	...	111	101	145	...	671	816		
10	Muthialpet ...	638	622	16	5	1	...	2	5	...	16	...	16	6	5	4	1	61	18	50	...	493	543				
11	Trevelyen Basin.	1293	1267	26	16	22	4	...	12	...	33	4	3	1	...	3	1	...	21	10	1	130	97	164	164	712	1040			
12	Maternity Home, Cholai.	2084	2028	56	29	12	...	2	5	...	1	3	...	54	5	53	19	...	1	1	...	1	...	18	13	2	2	...	3	2	233	154	221	...	1420	1641		
13	Pulianthope ...	1910	1855	55	21	7	...	2	14	15	...	20	12	60	12	2	1	11	...	1	...	21	7	3	209	187	218	198	1043	1459			
14	North Perambur.	969	944	25	6	4	...	1	1	...	8	...	10	18	7	1	8	9	73	80	123	19	649	791			
15	Sembiam ...	1243	1206	37	11	12	6	14	27	4	1	1	2	5	1	84	112	154	108	748	1010			
16	Ayanavaram ...	594	569	25	15	5	10	6	15	2	2	2	...	2	...	4	3	67	13	59	...	430	489		
17	Kilpauk ...	563	553	10	21	6	7	...	1	2	13	3	1	3	2	...	1	3	63	26	66	2	396	464		
18	Nammalwarpet ...	206	201	5	3	2	3	...	2	...	5	1	1	17	9	175	175		
19	Kosapet	
20	Purasawalkam ...	1456	1421	35	16	14	...	2	26	...	57	18	4	2	14	153	138	247	13	870	1130		
21	Periamet ...	247	241	6	4	...	1	...	8	1	1	2	...	22	5	19	...	195	214		
22	Edapalayam
23	Park Town ...	239	225	14	9	2	...	10	3	6	1	31	2	17	...	175	192	
24	Napier Park ...	357	350	7	6	5	1	4	...	6	...	2	9	1	2	1	2	1	40	10	43	...	257	300		
25	Egmore ...	282	275	7	2	1	2	...	1	...	5	...	5	2	5	23	9	39	...	204	243	
26	Chetpet ...	682	665	17	...	16	...	1	11	...	3	20	8	7	2	68	37	71	2	487	560			
27	Kodambakkam ...	954	927	27	21	2	2	1	2	...	22	...	17	2	5	1	6	1	3	85	79	156	32	575	763			
28	Royapettah ...	462	453	9	8	6	1	...	6	...	...	...	...	...	...	4	...	11	1	14	4	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	2	60	11				

Showing the total Number of Attendance of Expectant and Nursing Mothers and Children at the Out-patient Clinics in 1955

Serial No.	Centre	Attendance at Clinic								Total New Attendance	Total Old Attendance	Grand Total	Diseases Treated (New)														Total
		Infants		Pre-School		Expectant Mothers		Nursing Mothers					Respiratory	Alimentary	Skin Affection	Influenza	Ear and Eye Diseases	Anaemia	Vitamin deficiency	Malaria	Syphilis	Pyrexia	Fevers	Toxaemia	Normal	Other Diseases	
		New	Old	New	Old	New	Old	New	Old																		
1	Tondiarpet	2224	8795	954	1822	1322	3577	3530	9633	8030	23827	31857	746	911	75	65	94	451	465	15	3	...	411	...	3089	1705	8030
2	Palmyrah Kuppam	743	1781	149	53	672	821	1090	1779	2654	4434	7088	305	430	72	...	21	305	203	...	...	42	225	...	456	595	2654
3	Royapuram	972	1985	81	44	1252	1798	1214	1940	3519	5767	9286	564	418	109	376	42	453	473	8	...	163	...	...	765	148	3519
4	Sanjiviroyanpet	2039	2951	1417	752	1721	2739	2257	3158	7434	9600	17034	1731	1019	80	195	78	626	56	57	...	...	14	27	2466	1085	7434
5	Washermanpet	3401	10427	548	610	2414	5387	3945	10593	10308	27017	37325	933	945	333	522	248	563	715	183	123	...	...	...	4320	1423	10308
6	Vyasarpadi	1588	5621	167	264	1064	3258	2092	5940	4911	15083	19994	549	674	114	190	50	244	149	...	12	59	13	1	916	1940	4911
7	Peddunaickenpet	1172	1840	122	117	1095	1552	1123	1759	3512	5268	8780	958	833	61	312	24	169	290	92	1	82	...	169	90	431	3512
8	George Town	1994	9824	517	955	1265	4486	2620	9089	6396	24354	30750	441	727	68	834	8	402	294	12	29	42	38	7	2923	571	6396
9	Kothwal Bazaar	2815	7143	1206	1806	1154	2992	2951	6910	8126	18851	26977	752	1072	323	1262	196	503	479	202	1	...	...	...	1806	1530	8126
10	Muthialpet	1500	2650	145	135	1421	1966	1447	2528	4513	7279	11792	1199	1180	63	358	2	252	396	93	...	88	...	216	101	565	4513
11	Treveyen Basin	3242	5266	1072	1127	905	2551	2852	4492	8071	13436	21507	1109	1514	255	262	109	218	685	145	...	...	...	...	2014	1760	8071
12	Maternity Home, Choolai	2765	10460	958	1232	2283	6192	3371	10828	9377	28712	38089	2276	1951	183	1065	120	273	565	62	104	...	...	68	1511	1199	9377
13	Pulianthope	3240	7993	813	575	2084	2881	3835	8124	9972	19573	29545	1267	3952	654	948	484	610	232	16	1	...	...	...	718	1090	9972
14	North Perambur	881	1038	531	165	798	705	1316	1000	3526	2908	6434	751	697	286	175	315	256	266	...	...	30	...	...	185	565	3526
15	Sembiam	1981	4544	287	271	1442	3020	2293	5092	6003	12932	18935	1408	1200	509	1023	476	631	308	...	...	...	...	...	...	448	6003
16	Ayanavaram	1273	2137	312	170	1262	2066	1677	2276	4524	6649	11173	989	918	183	...	144	500	387	...	...	219	...	...	597	587	4524
17	Kilpauk	1039	5110	861	874	689	1174	1584	4060	4173	11238	15411	925	751	424	170	241	211	136	...	...	...	212	...	630	473	4173
18	Nammalwarpet	818	1181	243	95	691	628	878	1107	2630	3011	5641	517	467	145	...	167	237	206	...	...	57	80	...	386	368	2630
19	Kosapet	176	117	11	2	319	106	205	94	711	319	1030	155	122	26	117	11	41	63	...	...	...	...	...	28	148	711
20	Purasawalkam	3721	5733	1567	485	1410	1960	3449	5058	10147	13236	23383	2090	1866	371	1741	282	847	813	2	48	...	...	...	309	1778	10147
21	Periamet	1014	1041	398	179	834	1482	977	1113	3223	3815	7038	541	607	99	81	20	356	65	4	...	132	...	...	969	312	3223
22	Edapalayam	417	891	461	442	194	730	460	827	1532	2890	4422	425	314	110	...	103	116	22	...	...	85	...	...	237	120	1532
23	Park Town	672	1038	348	268	428	829	644	1028	2092	3163	5255	488	406	76	98	58	119	52	14	...	107	...	11	432	231	2092
24	Napier Park	935	1090	170	74	1011	1552	1112	1247	3228	3963	7191	656	540	78	90	1	562	116	15	...	145	...	...	71	954	3228
25	Egmore	904	985	358	140	673	1032	806	944	2741	3101	5842	619	478	88	111	...	328	117	10	...	132	...	...	189	669	2741
26	Chetpet	2334	5654	2476	3068	1096	2258	2320	5190	8226	16170	24396	1540	1873	802	871	342	478	300	...	...	...	...	...	1257	763	8226
27	Kodambakkam	1815	7619	387	466	1057	2081	2509	7957	5768	18123	23891	63	1380	88	523	10	308	153	5	4	...	...	12	1870	784	5768
28	Royapettah	1368	1709	163	98	944	1125	1166	692	3641	4624	8265	429	678	164	355	18	298	272	...	...	...	...	...	110	1317	3641
29	Triplicane	3279	13806	561	966	2011	4795	2994	13264	8845	32831	41676	2560	1255	182	210	105	475	561	13	2	50	253	...	2418	761	8845
30	Mirsaibpet	843	695	116	63	1375	1046	1004	789	3338	2593	5931	419	376	171	441	35	411	354	...	...	...	...	...	1128	3	3338
31	Mylapore	949	871	129	108	1215	1152	1030	943	3323	3074	6397	741	368	134	167	15	431	516	9	11	...	...	12	532	387	3323
32	Teynampet	619	51	22	7	990	417	529	65	2160	540	2700	288	257	27	38	30	208	96	...	...	2	25	2	806	381	2160
33	Saidapet	3041	12782	319	297	1833	3742	3235	12691	8428	29512	37940	656	1246	189	362	63	635	869	3	...	3	181	6	3013	1202	8428
34	Thyagaraya Nagar	357	20	17	...	759	385	104	...	1237	45	1642	38	74	...	...	...	180	314	...	...	...	...	...	98	533	1237
35	Saidapet Sub-centre	758	1631	216	106	546	922	682	1337	2202	3996	6128	169	236	88	91	37	176	210	...	...	3	7	2	1177	6	2202
36	Mandavalli	767	785	126	106	768	788	794	761	2455	2440	4895	599	264	92	105	11	254	333	1	3	3	...	11	390	389	2455
37	Adyar	1904	2230	1498	363	617	1285	2612	2721	6631	6599	13230	886	834	414	764	299	712	730	36	21	...	...	...	688	1247	6631
Total		59560	149499	19726	18325	41614	75480	66707	148029	187607	391333	578940	31350	32833	7136	13922	4259	13839	12261	1034	363	1444	1459	544	38695	28468	187607

APPENDIX

Annual Return—Maternity and Child Welfare—from 1st January to 31st December, 1955

Serial Number	Centre		Brought under Care					Women Medical Officers	Home Visits						Clinics									Maternal Mortality and Morbidity	
			Maternity Cases—Total No. of Mothers	Ante—Natal	Labour	Infants	Pre-School		Health Visitors				Midwives		Attendance									Mortality	Morbidity
									Ante-Natal	Post-Natal	Infants	Toddlers	Ante-Natal	Post-Natal	No. Held	Ante-Natal	No. Held	Nursing Mothers	No. Held	Infants	No. Held	Pre-School			
1	Tondiarpet	...	1967	1322	1481	1439	1029	552	...	193	5707	783	1756	6330	136	4899	49	13163	98	11019	98	2776	...	174	
2	Palmyrah Kuppam	...	1083	672	290	285	169	215	27	386	5915	169	1352	3442	102	1493	54	2869	54	2524	54	202	...	68	
3	Royapuram	...	1478	1252	531	520	358	411	25	116	6281	601	1081	5680	104	3050	52	3154	52	2957	52	125	...	187	
4	Sanjiviroyenpet	...	1721	1721	1914	1870	1304	554	5	31	3619	896	2160	9263	156	4460	156	5415	156	4990	156	2169	6	373	
5	Washermanpet	...	2414	2414	2275	2205	1621	882	21	143	3690	1476	2469	16252	157	7801	155	14538	155	13828	155	1158	3	648	
6	Vyasarpadi	...	1164	1064	1063	1032	168	249	3	78	2706	463	1250	2937	158	4322	146	8032	146	7209	146	431	1	254	
7	Peddunaickenpet	...	1275	1095	439	431	200	237	564	238	5386	600	1199	3642	95	2647	77	2882	77	3012	77	239	...	144	
8	George Town	...	1265	1265	1104	1086	858	754	39	48	3389	935	1315	5031	156	5751	155	11709	155	11818	155	1472	3	372	
9	Kothwal Bazaar	...	1160	1154	1256	1235	814	727	67	15	3579	558	1458	4263	157	4146	156	9861	156	9958	156	3012	2	540	
10	Muthialpet	...	1421	1421	678	648	543	435	34	495	5253	2080	668	7879	103	3387	103	3975	129	4150	129	280	2	202	
11	Trevelyan Basin	...	1244	905	1100	1086	1040	632	38	43	4768	501	876	4121	149	3456	149	7344	99	8508	99	2199	...	240	
12	Maternity Home, Choolai	...	2283	2283	2271	2212	1641	1266	23	50	8713	1346	1565	10280	157	8475	156	14199	156	13225	156	2190	1	602	
13	Pulianthope	...	2084	2084	2055	2018	1458	1601	71	93	7726	1395	2438	11298	157	4965	51	11959	103	11233	103	1388	1	753	
14	North Perambur	...	803	798	370	358	790	414	51	51	5457	520	1030	4437	135	1503	48	2316	54	1919	54	696	1	83	
15	Sembiam	...	1443	1442	1247	1214	1010	348	...	47	3034	668	2026	6251	150	4462	133	7385	133	6530	133	558	1	282	
16	Ayanavaram	...	1262	1262	828	803	489	296	290	285	4334	448	606	6118	156	3328	313	3953	313	3410	313	482	1	216	
17	Kilpauk	...	892	689	536	529	464	874	26	23	4273	363	1115	4198	154	1863	154	5644	154	6149	154	1755	1	193	
18	Nammalwarpet	...	691	691	361	352	175	331	93	17	5013	503	1207	3791	180	1319	180	1985	180	1999	180	338	1	48	
19	Kosapet	...	319	319	136	136	...	30	19	152	1065	104	42	1341	33	425	33	299	14	293	14	13	...	32	
20	Purasawalkam	...	1410	1410	1415	1389	1126	565	15	261	5415	673	1298	5344	156	3370	156	8507	104	9454	104	2052	3	353	
21	Periamet	...	838	834	304	295	213	195	65	304	3378	462	858	3473	105	2316	105	2090	105	2055	105	577	3	174	
22	Edapalayam	...	194	194	63	61	...	117	196	274	1365	70	269	734	81	924	81	1287	81	1308	81	903	...	63	
23	Park Town	...	441	428	186	185	192	280	450	46	2260	186	178	2429	105	1257	105	1672	105	1710	105	616	1	88	
24	Napier Park	...	1012	1011	433	429	301	305	218	415	3493	265	209	4543	104	2563	104	2359	104	2025	104	244	4	167	
25	Egmore	...	676	673	317	312	249	203	220	213	2707	223	410	2577	104	1705	104	1750	104	1889	104	498	...	148	
26	Chetpet	...	1310	1096	787	764	558	102	115	505	4517	502	1824	2985	144	3354	48	7510	144	7988	48	5544	1	84	
27	Kodambakkam	...	1214	1057	1107	1090	760	722	13	845	4238	601	1214	5064	156	3138	151	10466	104	9434	104	853	...	63	
28	Royapettah	...	963	944	524	516	382	452	58	140	3706	411	1057	4447	100	2069	52	2858	52	3077	52	261	...	145	
29	Triplicane	...	2013	2011	1642	1609	300	1302	50	7	11979	864	2632	6912	157	6806	155	16258	157	17085	156	1527	2	185	
30	Mirsaibpet	...	1414	1375	794	784	519	270	66	197	3916	620	1551	5867	52	2421	52	1793	50	1538	50	179	2	434	
31	Mylapore	...	1265	1215	655	637	530	243	10	343	5055	430	1375	3293	105	2367	53	1973	53	1820	53	237	...	63	
32	Teynampet	...	991	990	578	563	427	400	55	273	4203	385	1608	5587	90	1407	48	594	48	670	12	29	1	125	
33	Saidapet	...	1833	1833	2092	2060	1441	806	2	950	3920	702	1458	6216	157	5575	53	15926	156	15823	105	616	1	832	
34	Thyagaroya Nagar	...	762	759	401	393	330	206	52	101	4351	480	1155	4395	96	1144	42	104	48	377	48	17	1	33	
35	Saidapet Sub-Centre	...	547	546	154	153	...	214	10	27	3080	226	700	2314	79	1468	36	2019	36	2389	31	322	2	81	
36	Mandavally	...	768	768	380	368	336	120	6	227	2923	349	1373	3061	104	1556	52	1555	52	1552	52	232	...	89	
37	Adyar	...	676	617	518	502	420	928	157	296	3819	442	2246	3157	156	1902	48	5333	102	4134	102	1861	...	54	
Total			44296	41614	32285	31569	23215	19238	3154	7928	164233	22300	47028	188952	4489	117094	3365	214736	3989	209059	3800	38051	45	8592	

CHILD WELFARE

List of Child Welfare Centres where Serological examinations of blood of
Ante-natal cases are Conducted

1.	Maternity Home, Choolai	...	from	27-9-1951
2.	Saidapet Child Welfare Centre	...	,,	Dec. 1951
3.	Sanjiviroyanpet Child Welfare Centre	...	,,	May 1952
4.	Triplicane ,, ,,	...	,,	27-5-1952
5.	Pulianthope ,, ,,	...	,,	1-5-1953
6.	Washermanpet ,, ,,	...	,,	7-5-1953
7.	George Town ,, ,,	...	,,	1-4-1954
8.	Sembiam (up to 21-10-55) Ayanavaram (from 22-10-55)	,,	...	,,
9.	Purasawalkam ,, ,,	...	,,	1-4-1954
10.	Treveleyen Basin ,, ,,	...	,,	1-4-1954

List of Child Welfare Centres where Family Planning
Clinics are Conducted

FULL TIME

1.	Vyasarpadi Child Welfare Centre	...	6th Division
2.	George Town ,, ,, ,,	...	9th ,,
3.	Choolai Maternity Home	...	17th ,,
4.	Chetpet Child Welfare Centre	...	33rd ,,
5.	Triplicane ,, ,,	...	38th ,,
6.	Saidapet ,, ,,	...	47th ,,

PART TIME

7.	Tondiarpet Child Welfare Centre	...	1st ,,
8.	Washermanpet ,, ,,	...	5th ,,
9.	Treveleyen Basin ,,	...	16th ,,
10.	Ashok Vihar ,, ,,	...	26th ,,

APPENDIX

Child Welfare Centres and Creches

S. No.	Name of Centre.	Name of Division	Location	Dvn. No.	Phone No.	Beds	Date of opening
1.	Tondiarpet	...	New Washermanpet. 385, Thiruvotiyur High Road, Tondiarpet.	1	4615	18	13- 8-1947
2.	Palmyrahkuppam	...	Royapuram. Near Corporation Model Lines, Palmyrahkuppam.	2	2780	...	10- 9-1949
3.	Royapuram	...	Singarathottam. 26, Suriyanarayana Chetty Street, Royapuram.	3	2146	...	3-11-1924
4.	Sanjiviroyanpet	...	Sanjiviroyanpet. 21/22, Kappal Polu Chetty Street, Washermanpet.	4	2319	10	23- 3-1948
5.	Washermanpet	...	Korukupet. 86, Thiruvotiyur High Road, Washermanpet.	5	3258	12	26- 5-1919
6.	Vyasarpadi	...	Vyasarpadi. Bharathi Road, Perambur.	6	61205	12	1-10-1954
7.	Peddunaickenpet	...	Peddunaickenpet 18, Zinda Sahib Street. Peddunaickenpet.	8	4333	...	14- 7-1954
8.	George Town	...	Seven Wells. 44, Amman Koil Street, George Town.	9	3697	10	17- 5-1922
9.	Kothwal Bazaar	...	Ammen Koil. 1/27, Appumaistry Street, George Town.	10	4616	10	24- 9-1947
10.	Muthialpet	...	Muthialpet. 175, Tambu Chetty Street, George Town.	11	3121	...	24- 8-1924
11.	Treveyen Basin	...	Treveyen Basin. 52, Treveyen Basin Street, Sowcarpet.	16	3128	12	19- 7-1945
12.	Maternity Home	...	Choolai. 15, Vijayavigneswarar Koil Street, Choolai.	17	4617	50	29- 8-1947
13.	Pulianthope	...	Pulianthope. 1/33, Gantz Road, Pulianthope. (Previously at Pulianthope High Road.)	18	3880	13	15- 9-1950
14.	North Perambur	...	Perambur Barracks. 54, Perambur High Road, Perambur.	19	4523	...	3- 6-1928
15.	Sembiam	...	Sembiam. 45, Paper Mills Road, Sembiam.	20	61606	8	31- 5-1940
16.	Ayanavaram	...	Ayanavaram. United India Colony, Ayanavaram (Previously at 7 Gurusvappa Maistri Street.)	21	61788	12	9- 9-1946
17.	Kilpauk	...	Kilpauk. 19, Halls Road, Kilpauk.	22	61346	6	10- 4-1954
18.	Nammalwarpet	...	Purasawalkam. 14, Subbaraya Chetty Street, Nammalwarpet.	23	61092	...	28-10-1948
19.	Kosapet	...	Kosapet. 8, Chellappa Mudali Street, Kosapet.	24	61327	...	28- 6-1944
20.	Purasawalkam	...	Vepery. 109, Purasawalkam High Road, Purasawalkam.	25	61455	3	30- 4-1954
21.	Periamet	...	Periamet. 4/8, Naval Hospital Road, Periamet.	26	4341	...	31- 8-1955
22.	Ashok Vihar	...	Periamet. Ashok Vihar (Behind Moore Market).	26	4759	22	10-10-1919
							7- 3-1946
							19- 3-1956

APPENDIX

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23. Edapalayam	...	Edapalayam.	Mallaya Market, Wall Tax Road.	27	10- 6-1955
24. Park Town	...	Park Town.	2/3 Periera Street, Park Town.	28	4522	...	30- 5-1940
25. Napier Park	...	Napier Park.	1/61, Arunachala Naicken Street, Chintadripet.	29	85902	...	16- 5-1954
26. Egmore	...	Komaleeswaranpet.	37, Langs Garden Road, Pudupet.	31	86519	...	7- 7-1923
27. Chetpet	...	Thousand Lights.	27, Jaganathapuram 2nd Street, Chetpet.	33	8199	6	24- 9-1923
28. Nungambakkam	...	Nungambakkam.	15, Noore Veerasamy Iyer Street, Nungambakkam.	34	86580	...	31- 1-1956
29. Kodambakkam	...	Kodambakkam.	68, Arcot Road, Kodambakkam.	35	88469	10	5- 1-1949
30. Royapetah	...	Royapetah.	84, Lloyds Road, Royapetah.	37	86644	...	9-10-1929
31. Triplicane	...	Pudupakkam.	8, Nyniappa Maistri Street, Triplicane. (Previously at 2/3, Kuppumuthu Mudali Street.	38	86505	11	1- 8-1955
32. Zam Bazaar	...	Zam Bazaar.	24/25 Surappa Mudali Street, Zam Bazaar.	39	...	...	15- 9-1917
33. Mirsahibpet	...	Mirsahibpet.	65, Dr. Besant Road, Triplicane.	42	...	...	14- 9-1956
34. Mylapore	...	Mylapore North.	48, Bazaar Road, Mylapore.	43	86947	...	25-10-1941
35. Teynampet	...	Teynampet.	104, Mount Road, (Corporation Dispensary Bldg)	44	86570	...	4- 8-1924
36. Saidapet	...	T. Nagar South.	2, Jeenis Road, Saidapet.	46	88158	...	10- 3-1948
37. T. Nagar	...	T. Nagar South.	3, Sivagnanam Road, (Corporation Dispensary Bldg).	47	88265	50	28-11-1946
38. Saidapet	...	Saidapet.	24, Dhanapal Chetty Street, Saidapet.	47	...	...	10- 3-1948
39. Mandavalli	...	Adyar.	34, Brodies Road, Adyar.	48	...	...	30- 3-1955
40. Adyar	...	Adyar.	44, Vasantha Press Road, Arunachalpuram, Adyar.	50	86614	...	11- 2-1946
	...			50	71427	6	31-10-1947

Creches :

Royapuram	3	at Royapuram Child Welfare Centre.	4- 6-1951
Broadway	9	at Bunder Rama Naicken Garden, Broadway.	14-11-1947
Chetpet	33	at Chetpet Child Welfare Centre.	29-12-1951

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